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.

OWA Committee
T. Quinn, Chair
M. Katz, Vice Chair
L. Ackerman
D. Alvarez
J. Armstrong
G. Cordero
D. De Jesus
D. Erdman
L. Fong-Sakai
M. Gold
S. Goldberg
C. Kurtz
R. Lefevre
J. Lewitt
C. Miller
B. Pressman
N. Sutley

One Water and Adaptation Committee - Final - Revised 1

Meeting with Board of Directors *

March 10, 2025

2:30 p.m.

Monday, March 10, 2025 Meeting Schedule
09:00 a.m. EOT
11:00 a.m. LEG
12:00 p.m. Break
12:30 p.m. EEDEI
02:30 p.m. OWA

Agendas, live streaming, meeting schedules, and other board materials are available here: https://mwdh2o.legistar.com/Calendar.aspx. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: https://mwdh2o.legistar.com/Legislation.aspx.

If you have technical difficulties with the live streaming page, 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 on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 876 9484 9772 or to join by computer click here.

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012
Teleconference Locations:
3008 W. 82nd Place • Inglewood, CA 90305
525 Via La Selva • Redondo Beach, CA 90277
Allendale Insurance Agency • 337 West Foothill Boulevard • Glendora, CA 91740
Cedars-Sinai Imaging Medical Group • 8700 Beverly Boulevard, Suite M313 • Los Angeles, CA 90048

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* 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))

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Meeting One Water Stewardship Committee for February 10, 2025 (Copies have been submitted to each Director, any additions, corrections, or omissions) **21-4334**

Attachments: 03102025 OWA 2A (02102025) Minutes

3. CONSENT CALENDAR ITEMS - ACTION

7-4 Authorize the General Manager to enter into agreements with City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4307**

Attachments: 03112025 OWA 7-4 B-L
03102025 OWA 7-4 Presentation

7-5 Authorize the General Manager to terminate six inactive Conjunctive Use Program agreements; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [DEFERRED on 3/3/2025] **21-4308**

7-6 Authorize the General Manager to enter into a Stormwater for Recharge Pilot Program agreement with the City of Anaheim with a maximum amount up to $980,000 for the State College Stormwater Tank Project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4309**

Attachments: 03112025 OWA 7-6 B-L
03102025 OWA 7-6 Presentation

7-7 Authorize the General Manager to forbear water conserved by two Coachella Valley Water District projects, thus allowing the conserved water to be added to Lake Mead under U.S. Bureau of Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA **21-4310**

Attachments: 03112025 OWA 7-7 B-L
03102025 OWA 7-7 Presentation

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

4. OTHER BOARD ITEMS - ACTION

8-1 Authorize an increase of the maximum amount payable under the contract with Richardson & Company LLP for auditing services related to State Water Project charges from $5,125,000 to an amount not to exceed $8,900,000 and extend the term by three years to March 31, 2028; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-4306**

Attachments: 03112025 OWA 8-1 B-L
03102025 OWA 8-1 Presentation

5. BOARD INFORMATION ITEMS

NONE

6. COMMITTEE ITEMS

a. Update on Water Surplus and Drought Management **21-4341**

Attachments: 03112025 OWA 6a Report
03102025 OWA 6a Presentation

b. Palo Verde Valley Land Ownership Analysis **21-4342**

Attachments: 03102025 OWA 6b Report
03102025 OWA 6b Presentation

7. MANAGEMENT ANNOUNCEMENTS AND HIGHLIGHTS

a. Bay-Delta Resources activities **21-4335**
Colorado River Resources activities
Sustainability, Resilience and Innovation activities
Water Resources Management activities

Attachments: 03102025 OWA 7a Bay-Delta Resources Activities
03102025 OWA 7a Colorado River Resources Activities
03102025 OWA 7a Sustainability, Resilience and Innovation Activities
03102025 OWA 7a Sustainability, Resilience and Innovation Activities Presentation
03102025 OWA 7a Water Resources Management Activities

8. FOLLOW-UP ITEMS

NONE

9. FUTURE AGENDA ITEMS

10. ADJOURNMENT

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

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

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ONE WATER AND STEWARDSHIP COMMITTEE

February 10, 2025

Chair Quinn called the meeting to order at 3:04 p.m.

Members present: Directors Alvarez, Armstrong, Cordero, De Jesus, Erdman, Faessel, Fong-Sakai, Gold, Goldberg, Kurtz, Lefevre (entered after roll call, teleconference posted location), Lewitt (entered after roll call), Miller, Quinn, and Sutley (entered after roll call).

Members absent: Directors Ackerman and Pressman.

Other Board Members present: Chair Ortega, and Directors Dennstedt, Fellow, , and Seckel.

Committee Staff present: Bednarski, Crosson, Goshi (teleconference) Hasencamp, Hawk, Munguia, Polyzos, Rubin, Schlotterbeck, and Upadhyay.

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

Public Speakers included:

1. Christine McCaffrey, General Manager, Calleguas Municipal Water District spoke in support of item 9-2.
2. Jennifer Tribo, City of Ventura, spoke in support of item 9-2.

CONSENT CALENDAR ITEMS -- ACTION

2. CONSENT CALENDAR OTHER ITEMS -- ACTION

A. Approval of the Minutes of the Meeting One Water and Stewardship Committee for January 13, 2025

3. CONSENT CALENDAR ITEMS – ACTION

7-4 Subject: Authorize the General Manager to enter into an agreement with Palo Verde Irrigation District to jointly fund community investment in Palo Verde Irrigation District's service area; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Motion: Authorize the General Manager to enter into an agreement with Palo Verde Irrigation District to jointly fund community investment in Palo Verde Irrigation District's service area.

7-5 Subject: Authorize the General Manager to approve a new three-year agreement with WaterWise Consulting, Inc. for the Large Landscape and Residential Survey Program, for a total agreement not to exceed $200,000/year; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Motion: Authorize the General Manager to approve a new three-year agreement with WaterWise Consulting Inc. for the Large Landscape and Residential Survey Program, for a total agreement not to exceed $200,000/year.

7-6 Subject: Authorize the General Manager to expand the Bard Seasonal Fallowing Program and amend the System Conservation Implementation Agreement for Bard Seasonal Fallowing Program to increase its program size from 3,000 acres to 6,000 acres for the years 2025 and 2026; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Motion: Authorize the General Manager to expand the Bard Seasonal Fallowing Program and amend the System Conservation Implementation Agreement for Bard Seasonal Fallowing Program to increase its program size from 3,000 acres to 6,000 acres for the years 2025 and 2026.

No presentations were given. Director Alvarez made a motion seconded by Director Faessel, to approve the consent calendar consisting of items 2a, 7-4, 7-5, and 7-6.

The vote was:

Ayes:	Alvarez, Armstrong, Cordero, DeJesus, Erdman, Faessel, Fong-Sakai, Gold, Goldberg, Kurtz, Lefevre, Lewitt, Miller, Quinn, and Sutley.
Noes:	None.
Abstentions:	Director Quinn (Item 2a).
Absent:	Directors Ackerman and Pressman.

The motion for item 2a passed by a vote of 14 ayes, 0 noes, 1 abstention, and 2 absent.

The motion for items 7-4, 7-5, and 7-6 passed by a vote of 15 ayes, 0 noes, 0 abstentions, and 2 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

8-1 Subject: Authorize the General Manager to execute transfers, exchanges, and other State Water Project management transactions during 2025 and 2026; grant final decision-making authority to the General Manager subject to the terms set forth in this letter; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [2/3/2025 SUBJECT REVISED]

Presented by: Sarah J. Bartlett, Water Resources Program Manager

Motion: Authorize the General Manager to execute transfers, exchanges, and other State Water Project (SWP) management transactions during 2025 and 2026 and grant final decision-making authority to the General Manager subject to the terms set forth in this letter with the understanding that:

(1) Such transactions will only be pursued under conditions when Metropolitan projects adding to or spilling stored supplies accessible by the SWP-dependent areas;
(2) Staff will monitor, evaluate, and report on the efficacy of this program at it progresses; and
(3) An ad hoc committee will be established that will provide ongoing oversight and review of this program.

The following Directors provided comments or asked questions.

1. Ortega
2. Sutley
3. Gold
4. Miller
5. Armstrong
6. Lewitt
7. Goldberg
8. Kurtz
9. Cordero
10. Quinn
11. DeJesus

Staff responded to the Directors questions and comments.

Director Sutley left the meeting.

After completion of the presentation and a committee discussion, Director Armstrong made a motion, seconded by Director Cordero, to approve option #1 as amended,

Authorize the General Manager to execute transfers, exchanges, and other State Water Project management transactions during 2025 and 2026 and grant final decision-making authority to the General Manager subject to the terms set forth in this letter with the understanding that:

(1) Such transactions will only be pursued under conditions when Metropolitan projects adding to or spilling stored supplies accessible by the SWP-dependent ;
(2) Staff will monitor, evaluate, and report on the efficacy this program as it progresses; and
(3) An ad hoc committee will be established that will provide ongoing oversight and review of this program.

The vote was:

Ayes:	Directors Alvarez, Armstrong, Cordero, De Jesus, Erdman, Faessel, Fong-Sakai, Gold, Goldberg, Kurtz, Lefevre, Lewitt, Miller, and Quinn.
Noes:	None.
Abstentions:	None.
Absent:	Director Ackerman, Pressman, and Sutley.

The motion passed by a vote of 14 ayes, 0 noes, 0 abstentions, and 3 absent.

5. BOARD INFORMATION ITEMS

9-2 Subject: Information on proposed agreements with the City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water

Presented by: Marcia Ferreira, Engineer, Water Resource Management

Ms. Ferreira reported on the proposed wheeling of up to 2,000 acre-feet (AF) per year of City of Buenaventura's (Ventura) State Water Project (SWP) water through Metropolitan's system, and she provided information on the proposed exchange of water supplies during emergencies between Calleguas Municipal Water District and Ventura that may require delivery of Ventura and Metropolitan's SWP water into each other's service areas.

The following Directors provided comments or asked questions.
1. Fong-Sakai
2. Gold

Staff and Ms. Jennifer Tribo, City of Ventura, responded to the Directors' questions and comments.

9-3 Subject: Update on treatment approaches, contingencies, and amendments to the High Desert Water Bank Program agreement.

Presented by: Nadia Hardjadinata, Sr. Resource Specialist, Water Resource Management

Ms. Hardjadinata provided an update on the status, debt financing, groundwater modeling, and water quality of the High Desert Water Bank Program with Antelope Valley-East Kern Water Agency.

The following Directors provided comments or asked questions.
1. Gold
2. Sutley
3. Miller

Staff responded to the Directors' questions and comments.

Director Sutley returned to the meeting.

6. COMMITTEE ITEMS

a. Subject: Overview of Sites Reservoir Project

Presented by: Randall Neudeck, Manager, Bay-Delta Programs

Mr. Neudeck provided an overview of the Sites Project, its progress, and proposed Board informational & feedback sessions.

The following Directors provided comments or asked questions.

1. Erdman
2. Lewitt
3. Sutley
4. Lefevre

Staff responded to the Directors' questions and comments.

b. Subject: Report on State Water Project 2025 Statement of Charges and Audit

Presented by: Jaime L. Dalida, Sr. Resource Specialist

Ms. Dalida provided information on the 2025 audit of State Water Project charges in advance of a future request to extend audit contract.

c. Subject: Report on Metropolitan's existing partnerships and exchange agreements with the Coachella Valley Water District

Presented by: Bill Hasencamp, Manager, Colorado River Resources

Mr. Hasencamp provided information on all the existing exchange agreements between the Coachella Valley Water District and Metropolitan, and a update on the status of an additional exchange agreement that is under development.

d. Subject: Update on Water Surplus and Drought Management

Presented by: Larry Lai, Resource Specialist, Water Resource Management

Mr. Lai provided an update on water supply and hydrologic information.

7. MANAGEMENT ANNOUNCEMENT AND HIGHLIGHTS

a. Subject: Bay-Delta Resources activities
Colorado River Resources activities
Sustainability, Resilience, and Innovation activities
Water Resource Management activities

John Bednarski, Assistant General Manager, noted that there was nothing to add beyond the reports that were distributed.

8. COMMITTEE REPORTS

a. Report on the Delta Conveyance Design and Construction Authority Meeting

There was nothing to report as there was not a meeting in January.

b. Report on Delta Conveyance Finance Authority Meeting

Chair Quinn provided the report in Director Luna's absence.

c. Report on Bay-Delta Ad Hoc Meeting

Chair Quinn provided the report in Director McMillan's absence.

9. SUBCOMMITTEE REPORTS AND DISCUSSION

a. Discuss and provide direction to Subcommittee on Demand Management and Conservation Programs and Priorities

Director Armstrong noted that he had nothing to report and that the committee was being eliminated.

10. FOLLOW-UP ITEMS

None.

11. FUTURE AGENDA ITEMS

None.

12. ADJOURNMENT

The next meeting will be held on March 10, 2025

The meeting adjourned at 5:08p.m.

Tracy Quinn
Chair

Board of Directors

One Water and Adaptation Committee

3/11/2025 Board Meeting

7-4

Subject

Authorize the General Manager to enter into agreements with the City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff recommends the Board of Directors (Board) authorize the General Manager to enter into agreements requested by Calleguas Municipal Water District (Calleguas) and the City of San Buenaventura (Ventura) that will facilitate deliveries between the two agencies via a new interconnection pipeline. The proposed agreements include an agreement for the proposed wheeling of Ventura's State Water Project (SWP) water through Metropolitan's system for Ventura, and an agreement to consent to the delivery of SWP supply under emergency circumstances. Calleguas is a Metropolitan member agency that is included in the SWP-dependent area and receives imported water from Metropolitan via three service connections off a single pipeline. The Calleguas service territory borders Ventura, which has a SWP allocation through its contractual relationship with the Ventura County Watershed Protection District. Ventura has no physical connection to SWP facilities and has never delivered SWP water to its service area. Currently, Ventura and Calleguas are building a bidirectional interconnection pipeline, the C-V Interconnection Pipeline (CVIP), to connect their water distribution systems. The bidirectional pipeline will provide the infrastructure necessary to allow Ventura's SWP allocation to be delivered through the wheeling agreement.

The purpose of the agreements described in this board letter is for Metropolitan to wheel up to 2,000 acre-feet (AF) per year of Ventura's SWP water to Calleguas, when it determines capacity is available to do so, and that water then will be transported by Calleguas to the CVIP for delivery to Ventura, and during times of emergencies, allow the exchange of water supplies between Ventura and Calleguas that may involve delivery of SWP water into each other's service areas. Staff has developed draft agreements with Ventura and Calleguas to accomplish the objectives described above (**Attachment 1 and Attachment 2)** and presented an informational item to the Board in February 2025.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Authorize the General Manager to enter into agreements with the City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Fiscal Impact: Metropolitan will receive financial compensation to cover its costs as provided for in the wheeling agreement. There is no fiscal impact nor obligation to Metropolitan in allowing Calleguas and Ventura to provide water to each other during emergencies.

Business Analysis: The agreements help improve resilience in Ventura County while protecting Metropolitan's interests as the wheeling will only occur if Metropolitan staff identify available capacity and financial compensation is provided.

Option #2

Direct the General Manager not to enter into agreements under the proposed terms.

Fiscal Impact: None

Business Analysis: Not authorizing the wheeling agreement would require Metropolitan to negotiate each transaction with Ventura when its SWP water is available for wheeling and when Metropolitan has capacity to do so. Not authorizing the agreement to consent to SWP water in each service area during emergencies would not allow emergency delivery of water between Calleguas and Ventura. This will effectively halt the bidirectional interconnection pipeline between Calleguas and Ventura and potentially negatively impact water supply reliability in Ventura County.

Alternatives Considered

None

Applicable Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Related Board Action(s)/Future Action(s)

None

Summary of Outreach Completed

Staff presented on the proposed agreements to the One Water and Stewardship Committee in February 2025.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves entering into agreements with the City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of SWP water associated with the operation of existing public water conveyance facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. (State CEQA Guidelines Section 15301.)

CEQA determination for Option #2:

None required

Details and Background

Background

Calleguas is a Metropolitan member agency located in Ventura County. In general, Metropolitan takes delivery of SWP water at Castaic Lake via Metropolitan's Foothill Feeder, treats this water at the Joseph Jensen Water Treatment Plant, and delivers the treated water to Calleguas via one of three service connections located off Metropolitan's West Valley Feeder No. 1 and 2 (Figure 1 – blue arrows). During drought periods, Metropolitan can also deliver treated Colorado River water via Metropolitan's Greg Avenue Pump Station to Calleguas. Calleguas provides this treated water to several cities and water agencies in Ventura County, as well as the Naval Base Ventura County. Calleguas aims to improve water supply resilience by proposing interconnections with other agencies, such as Ventura and Las Virgenes Municipal Water District, another Metropolitan member agency.

Ventura is also located in Ventura County but is not a Metropolitan member agency. Since 1971, Ventura has shared the cost of the Ventura County Watershed Protection District State Water Project contract with Casitas Municipal Water District (Casitas) and United Water Conservation District (United). Ventura's SWP Table A

share is 10,000 AF, but Ventura has no physical connection to SWP facilities and has never taken delivery of SWP supplies. Ventura has expressed interest in starting to take delivery of up to 2,000 AF per year of its SWP supplies.

Calleguas and Ventura are project partners on the CVIP, which includes an approximate seven-mile-long bidirectional pipeline that interconnects the two agencies from a water supply standpoint. Once operational, the CVIP would allow water to flow between the two agencies during an emergency, and would also allow Ventura to receive SWP supplies, provided that Metropolitan wheels Ventura's SWP water to Calleguas. The CVIP is schematically shown in Figure 1 and is expected to be online in autumn 2026/spring 2027. Both proposed uses of the pipeline are covered under the set of draft agreements **(Attachment 1 and Attachment 2)** described later in this board letter.

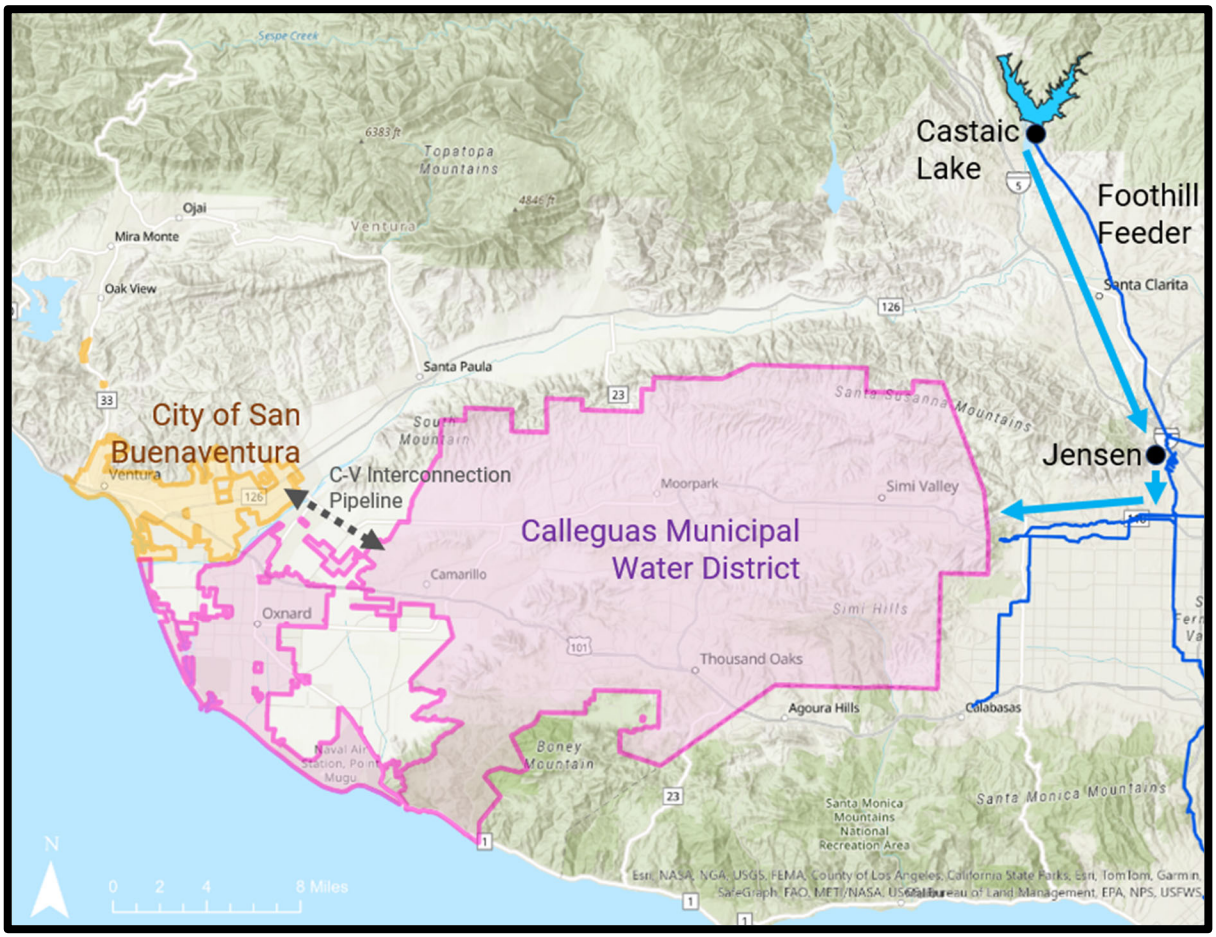


Figure 1– Location Map.

Blue arrows on the right of the figure indicate the water path from Castaic Lake to Calleguas. The CVIP (labeled) between Ventura and the City of Camarillo (Calleguas' service area) is a bidirectional pipeline not drawn to scale.

Proposed Agreements

Two separate agreements are needed to support the proposed uses of the CVIP: (1) an agreement to wheel SWP water; and (2) an agreement to consent to delivery of MWD and Ventura's SWP supply to each other's service area during an emergency.

1) Agreement to wheel Ventura's SWP water

Ventura proposes to receive up to 2,000 AF per year of their SWP supplies using the interconnection with Calleguas. For that to happen, Metropolitan would wheel Ventura's SWP supplies from Castaic Lake and deliver

them to Calleguas. Currently, Metropolitan only delivers treated water to Calleguas, so the wheeled water would also be a treated water supply. Calleguas would then wheel this water to the CVIP under a separate agreement between Calleguas and Ventura. The draft wheeling agreement between Metropolitan, Calleguas and Ventura (**Attachment 1**) specifies terms and conditions for the wheeling, as well as financial compensation for Metropolitan.

The key terms of this agreement are summarized below:

- System losses will be applied for the wheeled water
    - System losses would be reviewed every five years
    - Metropolitan system losses are currently 3%
    - Calleguas system losses are currently 0.5%
- Metropolitan staff will determine if sufficient capacity is available prior to wheeling
- Metropolitan will deliver treated wheeled water to Calleguas via its current water service connections off West Valley Feeder No. 2
- Financial compensation for Metropolitan
    - Wheeling price is a fixed dollar amount, initially based on the currently published transportation-related rate elements, the System Access Rate and the System Power Rate, and the published Treatment Surcharge
        - In calendar year 2025 the price is $622 + $483 = $1,105 per acre-foot
        - In calendar year 2026 the price is $671 + $544 = $1,215 per acre-foot
    - For years beyond 2026, the price will be based on an annual increase from the previous year's wheeling price plus a percentage increase equal to the Consumer Price Index for All Urban Consumers (CPI-U) series “Water and sewerage maintenance in U.S. city average, all urban consumers, not seasonally adjusted.”
        - In calendar year 2027, the price per acre-foot would be $1,215 + ($1,215 * CPI-U%)
        - In calendar year 2028, the price per acre-foot is the 2027 wheeling price + (2027 wheeling price * CPI-U%)
        - In calendar year 2029, the price per acre-foot is the 2028 wheeling price + (2028 wheeling price * CPI-U%)

The CPI-U for water and sewerage maintenance has increased at rates that outpace general measures of inflation over a longer-term perspective (i.e., CPI-U all items) reflecting the acute cost pressures affecting water/wastewater utilities nationally.

Once this wheeling agreement is signed, Metropolitan staff will work with Ventura to enter into an agreement with the California Department of Water Resources (DWR). In this agreement with DWR, Castaic Lake will be specified as the point of delivery of Ventura’s SWP supplies to Metropolitan for wheeling and will indicate that all SWP charges, including variable power rates, will be paid by Ventura.

2) Agreement to consent to delivery of Metropolitan and Ventura’s SWP supply to each other’s service area during an emergency

Calleguas proposes to receive water supplies from Ventura using the CVIP during emergency circumstances that prevent Metropolitan from delivering water to Calleguas. This would address Calleguas’ vulnerability of having a single pipeline delivering treated imported water from Metropolitan. Similarly, Ventura would also be able to receive water supplies from Calleguas during emergency situations. However, Section 15(a) of the State Water Contract prohibits a contractor from providing SWP supplies to another contractor’s service area without that contractor’s consent. The draft agreement (**Attachment 2**) would provide such consent.

The key terms of this agreement are summarized below:

- Definition of emergencies
    - Planned and unplanned water service interruptions
    - Emergencies do not include drought conditions

- Narrow scope
    - Either Calleguas or Ventura can borrow supplies during an emergency
    - The borrowed water during emergencies will be returned in a 1:1 ratio
    - Limited to consent for SWP water to be delivered in each other's service area
        - No financial compensation for Metropolitan for the consent
    - Does not obligate Metropolitan to deliver SWP supplies to Calleguas either for emergency deliveries to Ventura or for return of water by Calleguas to Ventura

Summary

The authorization of the General Manager to enter into agreements with Calleguas and Ventura will allow Ventura to receive a portion of its SWP water via wheeling by Metropolitan, and will allow Ventura and Calleguas to provide water deliveries during emergencies. These actions will improve overall water resilience in Ventura County, as well as support Metropolitan's member agency (Calleguas) by increasing the resilience of their water infrastructure.

2/25/2025
Brandon J. Goshi *Date*
Interim Manager,
Water Resource Management

2/25/2025
Deven N. Upadhyay *Date*
General Manager

Attachment 1 - DRAFT Agreement for Wheeling of Water Between the Metropolitan Water District of Southern California, Calleguas Municipal Water District, and the City of San Buenaventura

Attachment 2 – DRAFT Agreement for Permission to Deliver State Water Project Water into The Service Area of State Water Project Contractors Metropolitan Water District of Southern California and City of San Buenaventura (Through Ventura County Watershed Protection District) Under Emergency Circumstances

Ref# wrm12700111

AGREEMENT FOR PERMISSION TO DELIVER STATE WATER PROJECT WATER INTO THE SERVICE AREAS OF STATE WATER PROJECT CONTRACTORS METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND CITY OF SAN BUENAVENTURA (THROUGH VENTURA COUNTY WATERSHED PROTECTION DISTRICT) UNDER EMERGENCY CIRCUMSTANCES

This Agreement is entered into this _____ day of _____, 20_____ by The Metropolitan Water District of Southern California (Metropolitan), Calleguas Municipal Water District (Calleguas), and the City of San Buenaventura (Ventura), referred to individually as a "Party" or collectively as the "Parties."

RECITALS

A. Metropolitan is a public agency of the State of California incorporated under the Metropolitan Water District Act, Stats. 1969, ch. 209, as amended, codified at Section 109.1 *et seq*. of Appendix Section 109 to the California Water Code. It is a voluntary cooperative made up of its member agencies. Currently, Metropolitan imports water from the State Water Project (SWP) and the Colorado River and distributes water to its member agencies located in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Metropolitan is a State Water Contractor with participating rights in the SWP.

B. Calleguas is a public agency organized under the Municipal Water District Act of 1911. Calleguas is a member agency of Metropolitan.

C. Ventura is a California Charter Law Municipal Corporation and is not a member agency of Metropolitan. Ventura shares the cost of the Ventura County Watershed Protection District SWP Contract with Casitas Municipal Water District and United Water Conservation District (United) and Ventura has the right to receive delivery of SWP water.

D. On May 1, 2023, an Agreement between Calleguas, Ventura, and United (Interconnection Agreement) was executed for construction and operation of the Calleguas-Ventura (C-V) Interconnection Pipeline to convey water between the Calleguas and Ventura distribution systems.

E. Ventura and Metropolitan intend to enter into an agreement for Metropolitan to wheel Ventura's SWP water from Metropolitan's SWP turnouts at Castaic Lake through Metropolitan's facilities to Calleguas (the "Wheeling Agreement"). Calleguas will then wheel Ventura's SWP water to Ventura through its own system and the new C-V Interconnection

Pipeline and into Ventura's distribution system pursuant to the Interconnection Agreement.

F. In addition to the delivery of Ventura's SWP water on a regular basis, Calleguas and Ventura intend for the C-V Interconnection Pipeline to serve as a bidirectional emergency conveyance pipeline to provide water to each other during an emergency and to "pay back" that water after the emergency.

G. Metropolitan and Ventura (through the Ventura County Watershed Protection District) are SWP contractors and subject to the contractual restrictions therein. SWP contractors may not deliver water into another contractor's service area without that contractor's written consent.

NOW THEREFORE, in consideration of the foregoing and the mutual covenants set forth herein, and for other good and valuable consideration, the receipt, adequacy and sufficiency of which are acknowledged, the Parties agree as follows:

AGREEMENT

1. Purpose. This Agreement provides consent by each of Metropolitan and Ventura for SWP water to be delivered into each other's service area under the conditions stated in Sections 4, 5, 6 and 7.

2. Consent. Section 15(a) of the State Water Contract prohibits a contractor from providing SWP supplies to another contractor's service area without that contractor's consent. Accordingly, Metropolitan and Ventura hereby agree that during times of emergency caused by operational interruptions, as stated in Sections 4, 5, 6, and 7, Ventura may provide its water (which may include SWP water) to Metropolitan Member Agency Calleguas and Calleguas may provide Metropolitan water (which may include SWP water) to Ventura for the term of this Agreement. Emergencies pursuant to this Agreement include planned and unplanned water service interruptions and do not include drought conditions.

3. Notice of Emergency Delivery. Calleguas shall notify Metropolitan of emergency deliveries within 24 hours of the emergency, and provide the following information, including: start date for deliveries, the requesting party (Calleguas or Ventura), estimated duration and quantity of deliveries, the source of deliveries (e.g., local or SWP supply), and the reason for the emergency. Notification to parties shall be according to Section 11.

4. Permitted Delivery of Ventura SWP Water to Calleguas During Emergencies.

The consent provided herein is limited to an emergency circumstance that involves a planned or unplanned operational interruption that results in Metropolitan not being able to

deliver water to Calleguas. In that circumstance, Ventura may make emergency water deliveries to Calleguas that may include Ventura's SWP water delivered via the C-V Interconnection Pipeline.

5. Permitted Delivery of Metropolitan SWP Water to Ventura After Emergencies. In exchange for emergency water deliveries from Ventura, Calleguas intends to return an equal amount of water to Ventura using water that may include Metropolitan's SWP water. Ventura consents to delivery of Metropolitan's SWP water in Ventura's service area, limited to the return of water Calleguas owes Ventura for emergency water deliveries. Any return by Calleguas of emergency water deliveries shall not be subject to the Parties' Wheeling Agreement, as the water returned by Calleguas is not being wheeled on behalf of Ventura; it is water that Metropolitan delivered to Calleguas.

6. Permitted Delivery of Metropolitan SWP Water to Ventura During Emergencies. The consent provided herein is limited to an emergency circumstance that involves a planned or unplanned operational interruption in the service area of Ventura, during a time when Ventura's SWP water is unavailable for Metropolitan to wheel that water to Ventura. In that circumstance, Calleguas may make emergency water deliveries to Ventura that may contain Metropolitan's SWP water delivered via the C-V Interconnection Pipeline. Ventura consents to delivery of Metropolitan's SWP water within Ventura's service area during an emergency. Delivery by Calleguas of emergency water deliveries shall not be subject to the Parties' Wheeling Agreement, as the water delivered by Calleguas is not being wheeled on behalf of Ventura; it is water that Metropolitan delivered to Calleguas.

7. Permitted Delivery of Ventura SWP Water to Calleguas After Emergencies. In exchange for emergency water deliveries from Calleguas, Ventura intends to return an equal amount of water to Calleguas using water from its service area that may contain SWP water or from Ventura's SWP supply wheeled by Metropolitan to Calleguas under the Wheeling Agreement. Metropolitan consents to the delivery of Ventura's SWP water in Calleguas' service area, limited to the return of the water Ventura owes Calleguas for emergency water deliveries. If return is made using Ventura's SWP water wheeled by Metropolitan to Calleguas for Ventura, it will be subject to the Wheeling Agreement and the charges set forth therein, except that Calleguas need not wheel the water to Ventura as otherwise contemplated by the Wheeling Agreement.

8. Scope of Metropolitan's Obligations. This Agreement is limited to Metropolitan's and Ventura's consent for SWP water to be made available in its service area as described

herein. It does not obligate Metropolitan to make water available to Calleguas for emergency deliveries to Ventura or for return of water by Calleguas to Ventura.

9. Commencement. This Agreement is effective on the date that the last party has executed the Agreement.

10. Termination. This Agreement terminates on December 31, 2055 or upon the termination of the current State Water Contracts with the California Department of Water Resources, whichever comes first.

11. Notification. Unless and until changed by notification given in accordance with this Section, any notice, demand, or request to be given under or pursuant to this Agreement shall be given in writing at the physical addresses set forth below by personal service; overnight courier; or registered or certified, first-class mail, return receipt requested, or via electronic mail at the email address set forth below:

If to Metropolitan:

The Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153
Attention: General Manager

If to Calleguas:

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800
Attention: General Manager

If to City of Ventura:

City of Ventura
501 Poli Street
City Hall
Ventura, CA 93002-0099
Attention: City Manager

[signatures on following page]

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

_____ _____
Deven N. Upadhyay Dated
Interim General Manager

APPROVED AS TO FORM:

_____ _____
Marcia L. Scully Dated
General Counsel

CALLEGUAS MUNICIPAL WATER DISTRICT

_____ _____
Kristine McCaffrey Dated
General Manager

APPROVED AS TO FORM:

_____ _____
Walter E. Wendelstein Dated
District Counsel

CITY OF SAN BUENAVENTURA

_____ _____
Bill Ayub Dated
City Manager

APPROVED AS TO FORM:
Javan N. Rad, City Attorney

By: _____ _____
Miles Hogan Dated
Senior Assistant City Attorney

AGREEMENT FOR WHEELING OF WATER BETWEEN THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, CALLEGUAS MUNICIPAL WATER DISTRICT, AND THE CITY OF SAN BUENAVENTURA

This Agreement for Wheeling of Water (Agreement) is entered into by The Metropolitan Water District of Southern California (Metropolitan), Calleguas Municipal Water District (Calleguas), and the City of San Buenaventura (Ventura), referred to individually as a "Party" or collectively as the "Parties."

RECITALS

A. Metropolitan is a public agency of the State of California incorporated under the Metropolitan Water District Act, Stats. 1969, ch. 209, as amended, codified at Section 109.1 *et seq*. of Appendix Section 109 to the California Water Code. It is a voluntary cooperative made up of its member agencies. Currently, Metropolitan imports water from the State Water Project (SWP) and the Colorado River and distributes water to its member agencies located in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura.

B. Metropolitan's system is an interconnected statewide and regional system integrating the SWP, the Colorado River Aqueduct, and the distribution system within its service area. Accordingly, Metropolitan determines and attributes all costs to the system as a whole, including its capital, operation, maintenance, and replacements.

C. Calleguas is a public agency organized under the Municipal Water District Act of 1911. Calleguas is a member agency of Metropolitan.

D. Ventura is a California Charter Law Municipal Corporation and is not a member agency of Metropolitan. Ventura shares the cost of the Ventura County Watershed Protection District SWP Contract with Casitas Municipal Water District and United Water Conservation District (United) and Ventura has the right to receive delivery of SWP water. Ventura wishes to convey that water through a new interconnection pipeline that would transport SWP water from Calleguas's distribution system to Ventura's distribution system (the C-V Interconnection Pipeline). Prior to this Agreement, Ventura transferred its share of SWP water to other SWP contractors along and at the end of the California Aqueduct and now intends to take a portion of its SWP water for its own use.

E. Ventura desires to have Metropolitan wheel its SWP water from Metropolitan's SWP turnouts at Castaic Lake through Metropolitan's facilities, provided Metropolitan has capacity as described in this Agreement, to Calleguas. Calleguas will then wheel Ventura's SWP water to Ventura through its own system and the new C-V Interconnection Pipeline and into Ventura's distribution system pursuant to a separate agreement between Calleguas and Ventura (hereinafter the "Calleguas Ventura Agreement").

F. On May 1, 2023, an Agreement between Calleguas, Ventura, and United was executed for construction and operation of the C-V Interconnection Pipeline to convey water between the Calleguas and Ventura distribution systems.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the representations, warranties, covenants, and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge is fair compensation, the Parties hereby agree to the following terms and conditions of this Agreement.

1. Agreement to Wheel Ventura's SWP Supplies. Pursuant to this Agreement, Metropolitan agrees to wheel SWP supplies to which Ventura has rights to receive (SWP Supplies), provided Metropolitan has capacity, and Ventura agrees to pay Metropolitan for wheeling Ventura's SWP Supplies. Metropolitan will receive Ventura's SWP Supplies at Metropolitan's SWP turnouts at Castaic Lake and deliver the water, under the terms of this Agreement, to Ventura at the Metropolitan-Calleguas connections.

2. Quantity. Ventura anticipates a need to wheel up to two thousand acre-feet per year of its SWP Supplies through Metropolitan's system to Calleguas for transmission by Calleguas to the C-V Interconnection Pipeline. The amount of water actually wheeled will depend upon availability of Ventura's SWP Supplies and Metropolitan's determination of available capacity to wheel that amount of water at the requested times.

3. Delivery from Ventura to Metropolitan. Ventura may make its SWP Supplies available to Metropolitan at Metropolitan's turnouts at Castaic Lake for wheeling to Calleguas, provided that Metropolitan determines, in its sole discretion, that Metropolitan has available system capacity to wheel Ventura's SWP Supplies to Calleguas, as scheduled pursuant to Section

6.

4. Wheeling from Metropolitan to Calleguas. Metropolitan will wheel Ventura's SWP Supplies that it receives and accepts from Ventura and deliver that amount, less 3% to account for Metropolitan's system losses, to Calleguas at Metropolitan's Service Connections CA-01, CA-02, or CA-03, as scheduled by mutual agreement between Metropolitan, Calleguas, and Ventura pursuant to Section 6. System losses shall be subject to review and modification every 5 years. Metropolitan does not agree to store Ventura's SWP Supplies or to delay or accelerate deliveries on a schedule different than its receipt of Ventura's SWP Supplies; a separate agreement would be required if Ventura requires any storage or flexibility in scheduling deliveries of wheeled water that do not correspond to the time it makes its SWP Supplies available to Metropolitan. The water wheeled for Ventura will necessarily pass through Metropolitan's Joseph Jensen Water Treatment Plant and will therefore be treated at the Plant. The price Ventura pays in Section 12(a) includes Metropolitan's cost to treat the water.

5. Delivery from Calleguas to Ventura. Calleguas will deliver the Ventura SWP Supplies it receives from Metropolitan to Ventura at the connection to the new C-V Interconnection Pipeline, less 0.5% to account for Calleguas system losses, pursuant to a separate agreement. System losses shall be subject to review and modification every 5 years. Ventura will install a meter at the Ventura connection to the C-V Interconnection Pipeline that meets Metropolitan's specifications, which Calleguas will own, operate, and maintain, to measure deliveries from Calleguas to Ventura. Calleguas shall submit a meter report as shown in Exhibit A on or about the last day of each calendar month for billing purposes. The meter shall measure flow within an accuracy of two (2) percent and shall be available for testing by Metropolitan upon reasonable notice. Metropolitan will be allowed to receive near real-time and historical flow data, at its sole discretion, from Calleguas's purveyor website, with the cost of the necessary equipment and installation, and flow signal telemetry paid for in advance by Ventura. Calleguas shall be responsible for maintenance of the meter and communications system and shall provide calibration records to Metropolitan annually.

6. Scheduling of Deliveries. The Parties will cooperate to arrange for scheduling wheeling of the water. Ventura will provide an estimate and draft schedule of its SWP Supplies to be delivered to Metropolitan and Calleguas in the upcoming calendar year, by December 7 of each year. Ventura may also request, in writing, wheeling of its SWP Supplies throughout the

year, as supplies become available to Ventura. The annual estimate or the individual requests throughout the year will specify the desired flow rate, start date and time, and anticipated duration of the delivery. Within fourteen (14) days, Metropolitan and Calleguas will either propose an alternate schedule to Ventura, accept the schedule, or determine that they have no available capacity for the requested wheeling under this Agreement and under the Calleguas and Ventura agreement. The Parties agree that Metropolitan retains the right to modify any scheduled wheeling transaction due to its operational and maintenance needs with no liability to Metropolitan.

7. Metropolitan's Determination of Available Capacity. Under current conditions, the amount of water to be wheeled under this agreement is not significant compared to Metropolitan's system capacity and therefore, Metropolitan anticipates it will be able to accommodate Ventura's wheeling requests under this Agreement. However, Metropolitan does not guarantee the availability of capacity at any time during the term of this Agreement. Metropolitan agrees that it will evaluate and determine on a yearly basis and, upon receiving a request for wheeling under this Agreement, the amount and availability of unused capacity available to wheel water pursuant to this Agreement. In making its determination, Metropolitan may consider the following factors, which are not exhaustive of all relevant factors to be considered: (i) priority to be given for use of its system for deliveries to its member agencies, (ii) transportation of water for storage, treatment, or system operations, (iii) other uses of the system by its member agencies for any purpose, including emergencies, and (iv) system shutdowns, whether scheduled or unexpected. Metropolitan will not wheel water under this Agreement during any shutdown impacting Calleguas, unless otherwise agreed to by the Parties in writing. Metropolitan has no obligation to increase capacity on its system to wheel water to Ventura under this Agreement. Metropolitan's Board of Directors has delegated the authority to its General Manager to make such determinations and findings for purposes of this Agreement at the time wheeling is requested. The General Manager's determinations and finding will be substantiated in writing to the Parties.

8. Permits and Other Requirements. Ventura shall be solely responsible for obtaining any permits, environmental requirements, or approvals necessary for the transfer of its SWP Supplies to Metropolitan and wheeling through Metropolitan's system under this agreement, including any necessary agreements or approvals by the Department of Water

Resources (DWR), any applicable requirements pursuant to the California Environmental Quality Act (CEQA), and compliance with any applicable provisions of California Water Code Sections 1810-1814 (the Wheeling Statutes).

9. Water Quality. Ventura's SWP Supplies originate from and will be delivered to Metropolitan in the same manner as Metropolitan receives its own SWP water at the Castaic Lake turnouts and is therefore no different in water quality than Metropolitan's SWP water. Metropolitan will deliver water under this Agreement that meets the same quality standards of water it delivers to Calleguas. The water delivered to Ventura may consist of SWP water commingled with Colorado River or any other water in Metropolitan's system. Metropolitan is not responsible for the quality of water delivered beyond the point of delivery at Metropolitan's Calleguas Service Connections CA-01, CA-02, and CA-03.

10. Use of Water. Calleguas and Ventura may not sell, lease, or transfer Ventura's SWP Supplies for use within Metropolitan's service area. Calleguas may not use Ventura's SWP Supplies within its service area, unless such use is otherwise agreed to in a separate writing by Metropolitan, Calleguas, and Ventura.

11. Audit. Calleguas and Ventura will accurately maintain records of all water deliveries under this Agreement. Upon Metropolitan's request, Calleguas and Ventura will submit such records to Metropolitan within seven (7) days for review and approval.

12. Price.

(a) The price Ventura will pay Metropolitan to wheel water from Metropolitan's turnouts at Castaic Lake to Metropolitan's Calleguas Service Connections CA-01, CA-02, and CA-03 will be $1,105 in calendar year (CY) 2025 and $1,215 in CY 2026. The price for CYs 2025 and 2026 were determined by Metropolitan based on the published transportation-related rate elements, the System Access Rate and the System Power Rate, and the published Treatment Surcharge.

The price for CY 2027 will be based on the 2026 wheeling price of $1,215 plus a percentage increase equal to the Consumer Price Index for All Urban Consumers (CPI-U) series "Water and sewerage maintenance in U.S. city average, all urban consumers, not seasonally adjusted." The price for every year thereafter will be based on the wheeling price for the previous year plus a percentage increase equal to the CPI-U.

The price for the first five calendar years is summarized below to reflect examples of the annual

increase:

2025 = $1,105

2026 = $1,215

2027 = $1,215 + ($1,215 * CPI-U%)

2028 = 2027 wheeling price + (2027 wheeling price * CPI-U%)

2029 = 2028 wheeling price + (2028 wheeling price * CPI-U%)

In the event the CPI-U used in this agreement is no longer available, the parties will meet and confer to select a new escalator. Pending agreement regarding a new escalator, the annual increase will be calculated based on the average increase over the years from the beginning of the agreement to the year in which the applicable CPI-U is no longer available.

(b) The Parties agree that they have evaluated the anticipated wheeling transactions under this Agreement and determined that the volumetric price term under this Agreement constitutes a negotiated fair price for the transaction. The Parties agree they have not identified and do not claim the wheeling transactions under this Agreement provide any offsetting benefits to Metropolitan that would reduce Metropolitan's transportation-related costs and therefore the price in this Agreement.

(c) The Parties agree that if a court of competent jurisdiction makes a final determination that the price Ventura pays Metropolitan under Section 12(a) is invalid, then this Agreement is terminated.

13. Invoicing and Payment.

(a) Metropolitan shall bill Ventura for an amount of wheeling determined by the meter reading at the C-V Interconnection Pipeline on the last day of each month, adding the losses attributable to wheeling of the water on the Calleguas system (0.5%) and the losses attributable to wheeling on Metropolitan's system (3%). Any wheeling transaction that takes place during the billing month that is not recorded in time for billing purposes on the last day of the month shall be included in the following month's bill. Metropolitan will submit monthly invoices to Ventura, with a copy to Calleguas, electronically using the same billing processes and timeline provided for in Metropolitan's Administrative Code for bills to Metropolitan's member agencies.

(b) Certification and Billing to Calleguas. Calleguas shall submit Exhibit A for certification purposes pursuant to this Agreement consistent with Metropolitan's Administrative

Code, sections 4506 to 4507. The water delivered to Calleguas for wheeling to Ventura under this Agreement will be recorded as being delivered to Calleguas, but will be credited in the bill for water service from Metropolitan to Calleguas so as to not charge Calleguas for the water. Metropolitan's deliveries of water wheeled under this Agreement for Ventura do not constitute a water sale or other service provided from Metropolitan to Ventura or to Calleguas. Wheeling transactions under this Agreement shall not be treated as sales to Calleguas for purposes of any rates or charges owed to Metropolitan, including the Readiness-to-Serve Charge. Calleguas will be responsible for charges related to minimum and maximum flow rate exceedances at Metropolitan's Calleguas Service Connections CA-01, CA-02, and CA-03 as described in Metropolitan's Administrative Code Section 4504.

14. Discovery of Mistakes or Errors. In the event a mistake or error is discovered in a water delivery record, the Parties will cooperate to correct the mistake or error. However, no mistake or error made more than three years prior to its discovery will be corrected unless otherwise agreed to by the Parties in writing.

15. Disputes. In the event that Ventura or Calleguas disputes the total amount of water delivered, the charges for water delivered, and the total amount due and owing, all as determined by Metropolitan, such amounts due must be paid in full and timely while the dispute is being resolved. If the Parties, a court of law, or other entity with jurisdiction over Metropolitan determines any moneys paid by Ventura to Metropolitan must be returned to Ventura, then Metropolitan will return the funds and no interest will be owed by Metropolitan on that money. The Parties agree this provision constitutes a stipulated pre-judgment interest agreement for purposes of California Civil Code Section 3289 and agree that the interest rate is 0%.

16. Commencement. This Agreement is effective on the date that the last party has executed the Agreement.

17. Termination.

(a) This Agreement terminates on December 31, 2055 or upon the termination of the current State Water Contracts with DWR, whichever comes first.

(b) Notwithstanding Section 17(a), this Agreement may be terminated, or a Party may withdraw from the Agreement at any time, provided the Party gives 120 days written notice and all wheeling transactions in progress are completed.

18. Force Majeure. If the performance, in whole or in part, of the obligations of the

Parties, to wheel water under this Agreement is prevented: by acts or failures to act of DWR or any agency, court, or other government authority (other than the Parties), or any other person; by natural disaster (such as earthquake, fire, drought, or flood), contamination or outbreak of a water borne disease, war, strike, lockout, act of God, act of civil or military authority; by the operation of applicable law; or by any other cause beyond the control of the affected Parties, whether similar to the causes specified herein or not; then, in any such circumstances, the obligation of the affected Parties to wheel water under this Agreement shall be suspended from the time and to the extent that the performance thereof is prevented, but reasonable diligence shall be observed by the affected Parties, so far as it lies in their power, in performing such respective obligations in whole or in part under this Agreement. In the event such performance of any of the Parties under this Agreement is prevented as described above, then during the period of such prevention, performance by the non-affected Parties under this Agreement shall be excused until such prevention ceases, at which time all the Parties shall become obligated to resume and continue performance of their respective obligations hereunder during the term of this Agreement. No such prevention shall suspend or otherwise affect any payment obligations for water actually wheeled or any obligation of any Party to indemnify the other Parties pursuant to Section 20.

19. Applicable Laws. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

20. Indemnification.

(a) Ventura will defend, indemnify, and hold harmless Metropolitan and Calleguas against any claims concerning actions taken prior to Metropolitan assuming control of the water at Metropolitan's turnouts at Castaic Lake, concerning actions after Ventura assumes control of the water upon delivery to Ventura by Calleguas, and for any other activities under the exclusive control of Ventura.

(b) Metropolitan will defend, indemnify, and hold harmless Ventura and Calleguas against any claims concerning actions after Metropolitan assumes control of the water at Metropolitan's turnouts at Castaic Lake and prior to Calleguas assuming control of the water at Metropolitan's Calleguas Service Connections CA-01, CA-02, and CA-03, and for any other activities under the exclusive control of Metropolitan.

(c) Calleguas will defend, indemnify, and hold harmless Metropolitan against any

claims concerning actions after Calleguas assumes control of the water at Metropolitan's Calleguas Service Connections CA-01, CA-02, and CA-03 and prior to delivery to Ventura and for any other activities under the exclusive control of Calleguas.

(d) Ventura will defend, indemnify, and hold harmless Metropolitan and Calleguas against any claims alleging wheeling under this Agreement violates any law, including CEQA, the Wheeling Statutes, and any other laws.

(e) Notwithstanding anything in this Agreement to the contrary, each Party agrees to proceed with reasonable diligence and use reasonable good faith efforts to jointly defend any lawsuit or administrative proceeding initiated by any person other than the Parties challenging the legality, validity, or enforceability of this Agreement.

21. No Third-Party Rights. This Agreement is made solely for the benefit of the Parties. No other person or entity may have or acquire any right by virtue of this Agreement.

22. Ambiguities. Each Party and its counsel have participated fully in the drafting, review, and revision of this Agreement. No rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall be applied in the interpretation of this Agreement or any amendments or modifications thereof.

23. Entire Agreement. This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement among the Parties pertaining to the wheeling of water and supersedes all prior and contemporaneous understandings or agreements of the Parties. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty outside those expressly set forth in this Agreement.

24. Counterparts. This Agreement may be executed in two or more counterparts, each of which, when executed and delivered, shall be an original and all of which together shall constitute one instrument, with the same force and effect as though all signatures appeared on a single document.

25. Modification Only in Writing. This Agreement may only be changed by written amendment signed by all Parties. Any oral representations or modifications concerning this Agreement shall be of no force or effect.

26. Notification. Unless and until changed by notification given in accordance with this Section, any notice, demand, or request to be given under or pursuant to this Agreement shall be given in writing at the physical addresses set forth below by personal service; overnight

courier; or registered or certified, first-class mail, return receipt requested, or via electronic mail at the email address set forth below:

If to Metropolitan:

The Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153
Attention: General Manager

If to Calleguas:

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800
Attention: General Manager

If to City of Ventura:

City of Ventura
501 Poli Street
City Hall
Ventura, CA 93002-0099
Attention: City Manager

27. Dispute Resolution. The Parties agree to use their best efforts to prevent and resolve disputes by good faith cooperation and negotiation. In the event that any dispute arises among two or more Parties relating to this Agreement or the rights and obligations arising from this Agreement, the aggrieved Party or Parties shall provide written notice to the other Parties of the dispute. Within forty-five (45) days after such written notice, the Parties involved in the dispute shall attempt in good faith to resolve the dispute through informal means. If the Parties cannot agree upon a resolution of the dispute within forty-five (45) days from the providing of written notice specified above, the Parties involved in the dispute may decide to submit the dispute to mediation prior to commencement of any legal action. If the Parties involved in the

dispute agree to mediation, they shall select a neutral third-party mediator with appropriate expertise to mediate the dispute and the cost of mediation shall be paid in equal proportion among the Parties involved in the dispute. If no mediation is held or upon completion of any mediation that is held, if the controversy has not been resolved, any Party may exercise all rights to bring a legal action relating to the dispute.

28. Representation by Counsel. Each Party acknowledges that it has been represented by legal counsel of its choice throughout the negotiations which preceded the execution of this Agreement and that it has executed this Agreement with the consent and on the advice of such legal counsel. Each Party further acknowledges that it and its counsel have had adequate opportunity to make whatever investigation or inquiry they may deem necessary or desirable in connection with the subject matter of this Agreement prior to the execution hereof and the delivery and acceptance of the consideration specified herein.

29. Joint Drafting. This Agreement has been jointly negotiated and drafted. The language of this Agreement shall be construed as a whole according to its fair meaning and not strictly for or against any Party.

30. Signing Authority. Each person executing this Agreement on behalf of a Party warrants and represents to the other Parties that he or she is duly authorized to execute this Agreement on behalf of such Party and has the authority to bind their Party to the performance of its obligations hereunder.

[signatures on following page]

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

_____ _____
Deven N. Upadhyay Dated
Interim General Manager

APPROVED AS TO FORM:

_____ _____
Marcia L. Scully Dated
General Counsel

CALLEGUAS MUNICIPAL WATER DISTRICT

_____ _____
Kristine McCaffrey Dated
General Manager

APPROVED AS TO FORM:

_____ _____
Walter E. Wendelstein Dated
District Counsel

CITY OF SAN BUENAVENTURA

_____ _____
Bill Ayub Dated
City Manager

APPROVED AS TO FORM:
Javan N. Rad, City Attorney

By: _____ _____
Miles Hogan Dated
Senior Assistant City Attorney

EXHIBIT A

CALLEGUAS MUNICIPAL WATER DISTRICT

Calleguas-Ventura (C-V) Interconnection Pipeline Deliveries

For the month of August 2025

	Start Read	End Read	
Deliveries	7/31/2025	8/31/2025	Delivered
Meter C-V Interconnection	XXXX	XXXX	**234.0 Acre-Feet**

	Volume(acre-feet)	Rate ($/acre-foot)	Total
Delivery to C-V Interconnection[a]	234.0		
Calleguas System Loss at 0.5%[b]	1.2		
Delivery to Calleguas for Ventura[c]	235.2		
Metropolitan System Loss at 3%[d]	7.3		
Delivery to Metropolitan for Ventura[e]	242.5	$1,105	$267,962.50

a - Water delivered by Calleguas to Ventura at C-V Interconnection = V
b - Calleguas system loss calculated as 0.5% C (next footnote)
c - Water delivered by Metropolitan to Calleguas for Ventura = C = V / (1 - 0.005)
d - Metropolitan system loss calculated as 3% M (next footnote)
e - Water delivered to Metropolitan at Castaic Lake for Ventura = M = C / (1 - 0.03)

For the month of August 2025

Water Credited to Calleguas ..... **235.2 acre-feet**
Total Estimated Charges to Ventura **$267,962.50**

Signed by: _____ Date: _____
Name, Title
Calleguas Municipal Water District

One Water & Adaptation Committee

Agreements with the City of Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water

Item 7-4

March 10, 2025

Item 7-4

Authorize Wheeling and Emergency Water Exchange Agreements

Subject

Authorize the General Manager to enter into agreements with the City of Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water; the General Manager has determined that the proposed action is exempt or otherwise not subject CEQA

Purpose

Proposed wheeling of up to 2,000 acre-feet per year of City of Buenaventura (Ventura) State Water Project (SWP) water through Metropolitan's system and the proposed delivery of water supplies during emergencies between Calleguas Municipal Water District (Calleguas) and Ventura

Recommendation and Fiscal Impact

Staff recommends authorizing the General Manager to enter into agreements with the City of Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water.

Metropolitan will receive financial compensation to cover its costs provided for in the wheeling agreement. There is no fiscal impact in allowing the water deliveries during emergencies

Parties to the two Proposed Agreements

City of San Buenaventura (Ventura)

- State Water Project (SWP) supplies via the Ventura County Watershed Protection District
- No physical connection to the SWP facilities

Calleguas Municipal Water District (Calleguas)

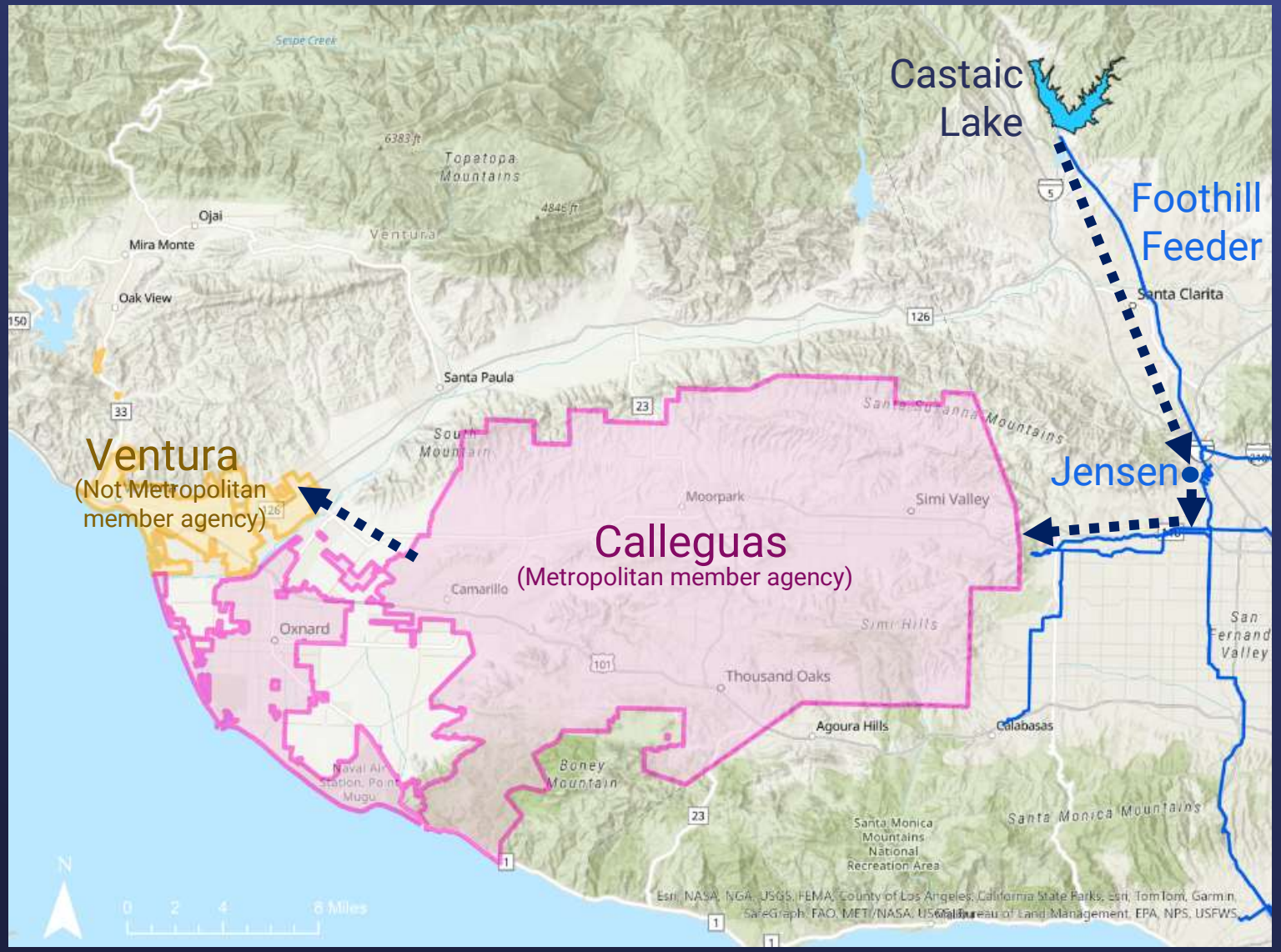
- Metropolitan's member agency
- Partner with Ventura on the interconnection pipeline connecting Calleguas and Ventura

Metropolitan Water District (Metropolitan)

- SWP contractor with connections at Castaic Lake

Wheeling SWP Water for Ventura

Ventura has rights to SWP water via the Ventura County Watershed Protection District



Metropolitan

- Takes delivery of Ventura SWP water at Castaic
- Wheels water via Foothill Feeder
- Treats water at Jensen
- Delivers treated Ventura SWP water to Calleguas

Calleguas

- Takes delivery of treated Ventura SWP from Metropolitan
- Wheels water via its distribution system
- Delivers treated Ventura SWP water to Ventura

Metropolitan-Ventura-Calleguas

Proposed Wheeling Agreement Terms

Summary of the wheeling agreement

- Ventura proposes to receive up to 2,000 acre-feet per year of their SWP water via wheeling

Financial Compensation

- Wheeling price is a fixed dollar amount
  - For calendar year 2026 the price is $1,215 per acre-foot
  - Annual increases based on a Consumer Price Index related to Water and Sewerage Infrastructure costs
- Ventura continues to pay its SWP charges

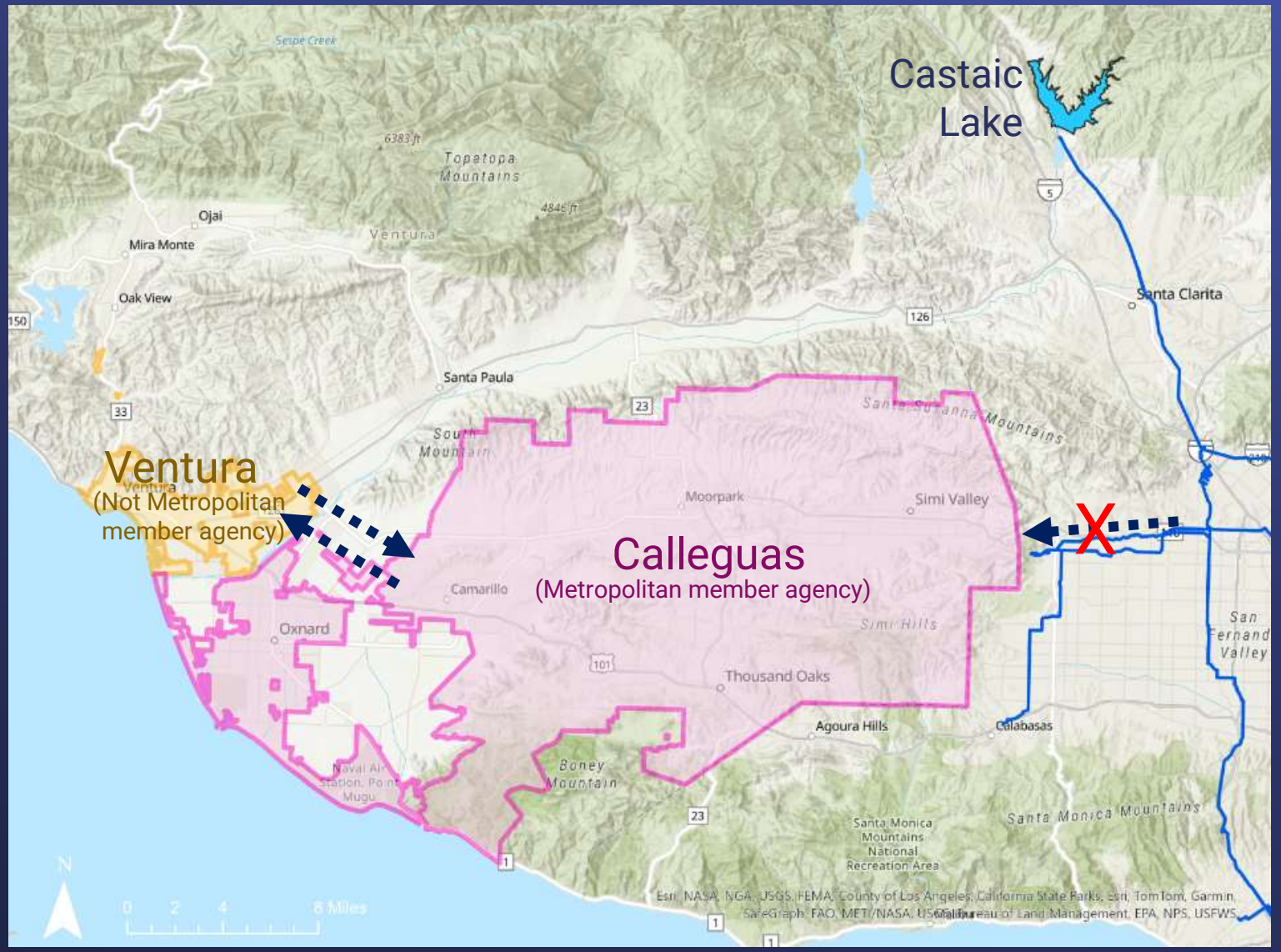
Operational Considerations

- Metropolitan staff will determine available capacity prior to wheeling
- System losses will be applied for the wheeled water
- Metropolitan will deliver treated water to Calleguas via existing service connections

Emergency Water Deliveries

Calleguas receives imported supplies from Metropolitan via a single tunnel

- Would be allowed during emergencies that prevent Metropolitan from delivering to Calleguas
- Ventura and Calleguas could borrow from each other during emergencies
- Since Ventura's supply might contain SWP water, authorization and consent from Metropolitan is needed



Metropolitan-Ventura-Calleguas

Proposed Emergency Water Deliveries Agreement Terms

Summary of the emergency use of SWP water agreement

- Calleguas and Ventura propose borrowing water from each other during emergency circumstances
- The agency borrowing the water will return an equal amount

Definition of Emergencies

- Planned and unplanned water service interruptions
- Emergencies do not include drought conditions

Scope of Metropolitan's obligations

- Limited to consent for water to be delivered in each other's (Ventura or Calleguas) service area
- No obligation for Metropolitan to make water available to Calleguas for emergency deliveries to Ventura or for return of water by Calleguas to Ventura

Metropolitan-Ventura-Calleguas

Clarifications on the Emergency Deliveries

No Sale of SWP Water

- Metropolitan is not granting authorization to Ventura to sell SWP water within Metropolitan service area
- Metropolitan is not selling SWP Water to Ventura

Water borrowed will be returned

- Metropolitan is authorizing Ventura to loan water (some may be SWP water) during an emergency
- Calleguas may purchase Metropolitan water at the full service rate to return to Ventura

Limited Consent

- Consent is limited to the scenarios described in the agreements

Board Options

Option #1

Authorize the General Manager to enter into agreements with the City of San Buenaventura and Calleguas Municipal Water District for wheeling and emergency delivery of State Water Project water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Option #2

Direct the General Manager not to enter into agreements under the proposed terms.

Staff Recommendation

Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

3/11/2025 Board Meeting

7-6

Subject

Authorize the General Manager to enter into a Stormwater for Recharge Pilot Program agreement with the City of Anaheim with a maximum amount of up to $980,000 for the State College Stormwater Tank Project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This letter seeks Board authorization to enter into a Stormwater for Recharge Pilot Program (Pilot Program) agreement with the City of Anaheim (Anaheim) with a maximum amount of up to $980,000 for the construction and monitoring of the State College Stormwater Tank Project (Project). The proposed Project agreement, if approved, will allow for the reactivation and repurposing of approximately 10,000 linear feet of large-diameter abandoned wastewater pipe for stormwater runoff treatment, capture, and infiltration, and performs a minimum of three years of stormwater recharge monitoring and reporting. The proposed Project agreement would quantify stormwater capture and its relationship to water supply yield, which will contribute to the Metropolitan's evaluation and understanding of the potential water supply benefits delivered by stormwater capture projects throughout the service area.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Authorize the General Manager to enter into a Stormwater for Recharge Pilot Program agreement with the City of Anaheim with a maximum amount of up to $980,000 for the State College Stormwater Tank Project.

Fiscal Impact: Total costs of $980,000 budgeted funds for eligible Project expenses and a three-year monitoring and reporting period. These payments will be taken from the approved $7.5 million Recharge Pilot Program budget (Minute Item 51793, dated November 5, 2019; Water Stewardship Fund).
Business Analysis: The Project agreement would help Metropolitan achieve the Recharge Pilot Program goal of understanding the relationship between stormwater capture and the water supply benefit of stormwater.

Option #2

Do not authorize the execution of an agreement for the State College Stormwater Tank Project.
Fiscal Impact: None
Business Analysis: Metropolitan would pursue other projects, and it may take longer to meet the goals of the Recharge Pilot Program.

Alternatives Considered

Not applicable

Applicable Policy

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Related Board Action(s)/Future Action(s)

- Authorize $7.5 million for a Stormwater for Recharge Pilot Program for developing and monitoring of stormwater for recharge projects (Minute Item, dated November 4, 2019; Water Planning and Stewardship Committee)
- Stormwater for Recharge Pilot Program agreement with Inland Empire Utilities Agency for the construction and monitoring of the Montclair Basins Improvement Project (Minute Item 52409, dated June 8, 2021; Water Planning and Stewardship Committee)
- Stormwater for Recharge Pilot Program agreement with Western Municipal Water District for the enhanced monitoring of the Victoria Recharge Basin Project (Minute Item 52271, dated February 9, 2021; Water Planning and Stewardship Committee)
- Stormwater for Recharge Pilot Program agreement with Central Basin Municipal Water District and the City of Bell Gardens (Minute Item 52272, dated February 9, 2021; Water Planning and Stewardship Committee)

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA because it involves the operation and minor alteration of existing public structures, facilities, and mechanical equipment involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. (State CEQA Guidelines Section 15301.) The proposed action is exempt from CEQA because it consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. (State CEQA Guidelines Section 15302.)

CEQA determination for Option #2:

None

Details and Background

Background

Metropolitan's Integrated Water Resource Plans have indicated the need for the development of a diverse regional resource portfolio that emphasized local supply development. Over the years, Metropolitan has played an active role in the development of those local supplies through different approaches and programs developed over the years. Since 1982, Metropolitan has provided incentives to its member agencies to develop local projects through the Local Resources Program (LRP). Local stormwater capture projects currently are not funded through the LRP in part due to the need to have a better understanding of the connection between captured stormwater and yield. To clarify this connection, Metropolitan developed the Stormwater Pilot Program (Pilot Program). Participants of the Pilot Program develop stormwater capture projects with the intention to measure the quantity of stormwater runoff capture and how the captured stormwater provides for new usable groundwater yields. The Board approved the Pilot Program on November 5, 2019 (Board Letter 8-3). The Pilot Program application process launched on March 27, 2020. Agencies may submit applications to install monitoring equipment on existing projects or construct new projects. To date, the Pilot Program has received six applications, two for monitoring equipment installation and four for new construction projects.

Proposed Project

The City of Anaheim plans to reactivate approximately 10,000 linear feet of abandoned large-diameter wastewater pipe beneath State College Boulevard, between Orangewood and Wagner Avenues, to treat, capture, and infiltrate stormwater runoff. The Project will involve diverting stormwater flows to a hydrodynamic separator for pre-treatment before being discharged into the repurposed wastewater infrastructure. This will help reduce the burden on the overtaxed OCFCD E12 facility, assist the City in meeting Trash Capture MS4 requirements, and recharge the Orange County Aquifer with treated stormwater. By capturing and infiltrating a portion of stormwater flows from Sub-District 27, the Project will also reduce untreated runoff entering downstream watercourses and lessen total runoff volumes.

The Project is estimated to have the ability to capture approximately 65.8 acre-feet of stormwater annually, or 3,290 acre-feet over the Project's 50-year lifespan. Key components of the Project include the construction of a diversion structure to redirect runoff, the installation of an in-line stormwater treatment system to remove trash and sediment, and the construction of junction structures to connect to the State College tank. Additionally, wireless monitoring devices will be installed to track the amount of stormwater captured and recharged, and four existing manholes will be modified with clean-out orifice systems to regulate flow. The installation of 25 dry wells along the existing wastewater line will facilitate groundwater infiltration.

To monitor the effectiveness of the system, the City will install automated flow monitors in manholes along the wastewater line to measure both wet and dry weather flow rates. These measurements will help assess the volume of stormwater being infiltrated into the groundwater aquifer. The Project's modeling approach involves using the Hydraflow Hydrographs Extension for AutoCAD Civil 3D to predict the volume of stormwater and dry-weather runoff to be captured. These estimates will be compared with real-time data from the flow monitors to verify the accuracy of the modeled infiltration rates. This data will be used to optimize the system's performance over time and ensure the targeted groundwater recharge is achieved.

Funding Structure

The funding includes two components: construction and ongoing monitoring and reporting. This Project has requested funding for construction, monitoring, and reporting for a total of $980,000

Component	Metropolitan	Anaheim	Total Project
Construction	$850,000	$1,509,090	$2,359,090
Monitoring and reporting	$130,000	$0	$130,000
Total	**$980,000**	**$1,509,090**	**$2,489,090**

Staff recommends approval of the funding agreement as this Project is consistent with the objectives of the Board-approved Pilot Program.

2/25/2025
Brandon J. Goshi *Date*
Interim Manager,
Water Resource Management

2/25/2025
Deven N. Upadhyay *Date*
General Manager

Ref# wrm12705210

One Water and Stewardship Committee

Anaheim State College Stormwater Tank Project

Item 7-6

March 10, 2025

Item 7-6

Introduction Slide

Subject

Authorize the General Manager to enter into a Stormwater for Recharge Pilot Program Agreement with the City of Anaheim for a maximum amount of up to $980,000 for the State College Stormwater Tank Project; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Purpose

contribute to the Metropolitan's evaluation and understanding of the potential water supply benefits delivered by stormwater capture projects throughout the service area.

Recommendations

Authorize: authorize staff to execute a Stormwater for Recharge Pilot Program Agreement with the City of Anaheim for the construction and monitoring of the State College Tank Project.

Fiscal Impact

Total costs of $980,000 budgeted funds for eligible Project expenses and a three-year monitoring and reporting period. These payments will be taken from the approved $7.5 million Recharge Pilot Program budget

Stormwater for Recharge Pilot Program

Program approved in November 2019

Application period open
January 2020 – December 2021

Total funding requested: $8.8 M

Goals of the Stormwater for Recharge Pilot

- Evaluate water supply benefit
- Establish link between capture and increased groundwater production or reduced replenishment
- Monitor groundwater data for 3 years
- Encourage robust long-term monitoring
- Develop framework

Stormwater for Recharge Pilot Examples

Western Victoria Basins Enhancement Project

- $0.5 million
- Agreement Executed in 2021
- Monitoring Only
- Completed Construction
- Completed 2 years of monitoring

IEUA Montclair Basins Improvement Project

- $ 1 million
- Agreement Executed in 2022
- Construction
- Completed Phase 1 of Construction
- Delays due to collapse of San Antonio Channel.

New Stormwater Project today for consideration

Goals of the Anaheim State College Tank Project

- Assess the volume of stormwater being infiltrated into the groundwater aquifer
- Capture approximately 65AFY of stormwater
- Reactivate abandoned pipe for new development

Anaheim State College Stormwater Tank Project

- Construction of a diversion structure to redirect stormwater runoff
- Install an in-line stormwater treatment system to remove trash and sediment
- Install of 25 dry wells to facilitate groundwater infiltration
- Wireless monitoring devices installation to track stormwater captured and recharged

Project Cost Share

Component	Metropolitan	Anaheim	Total Project
Construction	$850,000	$1,509,090	$2,395,090
Monitoring and reporting	$130,000	$0	$130,000
Total	$980,000	$1,509,090	$2,489,090

Board Options: Anaheim State College Stormwater Tank Project

Option #1

- Authorize the General Manager to enter into a Stormwater for Recharge Pilot Program Agreement with the City of Anaheim with a maximum amount of up to $980,000 for the State College Stormwater Tank Project

Option #2

- Do not authorize the execution of an agreement for the State College Stormwater Tank Project.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

3/11/2025 Board Meeting

7-7

Subject

Authorize the General Manager to forbear water conserved by two Coachella Valley Water District projects, thus allowing the conserved water to be added to Lake Mead under the U.S. Bureau of Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Staff seeks authorization for the General Manager to forbear water conserved by two Coachella Valley Water District (CVWD) projects, thus allowing the conserved water to be added to Lake Mead pursuant to funding provided by the U.S. Bureau of Reclamation's (Reclamation) Lower Colorado River Basin System Conservation and Efficiency Program (LC Conservation Program). Staff specifically seeks authorization to forbear the following actions: (1) CVWD reducing groundwater replenishment by up to 35,000 acre-feet in 2026, and (2) up to 33,600 acre-feet related to the upgrade and construction of tertiary treatment facilities at the CVWD Water Reclamation Plant No. 4.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Authorize the General Manager to forbear water conserved by two Coachella Valley Water District projects, thus allowing the conserved water to be added to Lake Mead under the U.S. Bureau of Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program.

Fiscal Impact: None
Business Analysis: The agreement would forbear additional system conservation to augment Colorado River supplies at no additional cost to Metropolitan.

Option #2

Do not enter into the forbearance agreement under the proposed terms.
Fiscal Impact: None
Business Analysis: Metropolitan would forego an opportunity to augment Colorado River water supplies to reduce the risk of future curtailment.

Alternatives Considered

No alternatives were considered.

Applicable Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 53051 in December 2022, Metropolitan's Board adopted legislative priorities and principles to support the funding of conservation projects to enhance the resiliency of the Colorado River System to reduce the risk of Lake Mead and Lake Powell falling below critical elevations.

Related Board Action(s)/Future Action(s)

By Minute Item 53447 in November 2023, Metropolitan's Board approved a similar action for system conservation created by CVWD and IID in 2023 to be left in Lake Mead as system water under Reclamation's LC Conservation Program.

By Minute Item 53752 in August 2024, Metropolitan's Board approved forbearance for system conservation created by CVWD and IID between 2024-2026 to be left in Lake Mead as system water under Reclamation's LC Conservation Program.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it will not result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. (State CEQA Guidelines Section 15378(a)).

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan often collaborates with other agencies to provide system water to Lake Mead. Most recently, Metropolitan has been collaborating with other agencies on a variety of projects under Reclamation's LC Conservation Program. Under these collaborative efforts, two California forbearance agreements have been signed. The first is the December 11, 2023, California Forbearance Agreement which covered LC Conservation Program activities in California in calendar year 2023. The second is the November 13, 2024, California Forbearance Agreement which covered LC Conservation Program activities within California, that existed at the time of the agreement, between calendar years 2024 and 2026.

California Forbearance Agreement for LC Conservation Program Agreements

Since the November 13, 2024, California Forbearance Agreement was signed, CVWD developed two new conservation agreements under the LC Conservation Program. One of these agreements is under Bucket 1 of the LC Conservation Program, while the other is under Bucket 2. In order for water conserved under these agreements to be left in Lake Mead, Metropolitan must forbear water generated from both agreements.

First, forbearance is needed for water conserved pursuant to an amendment of an existing agreement between Reclamation and CVWD to fund a reduction in groundwater replenishment by up to 35,000 acre-feet per year at $400 per acre-foot. The existing system conservation agreement covers 2023-2025. This amendment would extend the system conservation agreement to cover 2026 under the same volume and price terms.

Second, forbearance is needed for water conserved pursuant to an agreement between Reclamation and CVWD to upgrade Water Reclamation Plant No. 4 so that it can provide tertiary treated water for reuse within CVWD. Under this agreement, CVWD would upgrade/construct tertiary treatment facilities at the Water Reclamation Plant No. 4, thereby reducing its long-term demand for Colorado River water. CVWD expects that the tertiary treatment facilities will begin saving water in 2029. CVWD will use that savings to create system conservation water in Lake Mead at a rate of 1,120 acre-feet per year for 30 years, for a total of 33,600 acre-feet. CVWD would

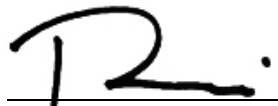
also have the option to pre-deliver conserved water to Lake Mead through another accepted conservation effort, such as replenishment curtailment.

Forbearance is necessary for these actions because, under the California priority system, Colorado River water conserved by a higher-priority user is available to the next lower-priority user. For additional background on the purpose and mechanics of a forbearance by Metropolitan, please see the June 2024 presentation on that subject, available at:

https://mwdh2o.legistar.com/View.ashx?M=F&ID=13012478&GUID=5C7533D3-F668-4FC6-A12E-EACEF0DF52DD.

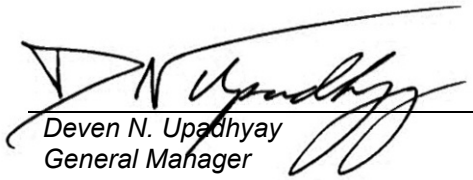
Benefits

With the forbearance of these two additional conservation programs, up to 68,600 AF of water will be added to Lake Mead. Metropolitan and other Colorado River water users benefit from increased Lake Mead elevation, power generation, and reliability of Colorado River water supplies.



2/24/2025

Brandon J. Goshi *Date*
Interim Manager,
Water Resource Management



2/24/2025

Deven N. Upadhyay *Date*
General Manager

Ref# wrm12799069

One Water and Adaptation Committee

Authorize Forbearance of Conserved Colorado River Water

Item 7-7

March 10, 2025

Item 7-7

Authorize Forbearance of Conserved Colorado River Water

Subject

Authorize the General Manager to forbear water conserved by two Coachella Valley Water District projects, thus allowing the conserved water to be added to Lake Mead under the U.S. Bureau of Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA.

Purpose

To obtain Board approval for agreements allowing water conserved by CVWD to be added to Lake Mead under Reclamation's LC Conservation Program.

Recommendation and Fiscal Impact

Authorize forbearance of water conserved by two Coachella Valley Water District Projects under the Lower Colorado River Basin System Conservation and Efficiency Program; No Fiscal Impact

Budget

No budget impact

Background

December 2023

California Forbearance Agreement covering Bucket 1 LC Conservation Projects in 2023

November 2024

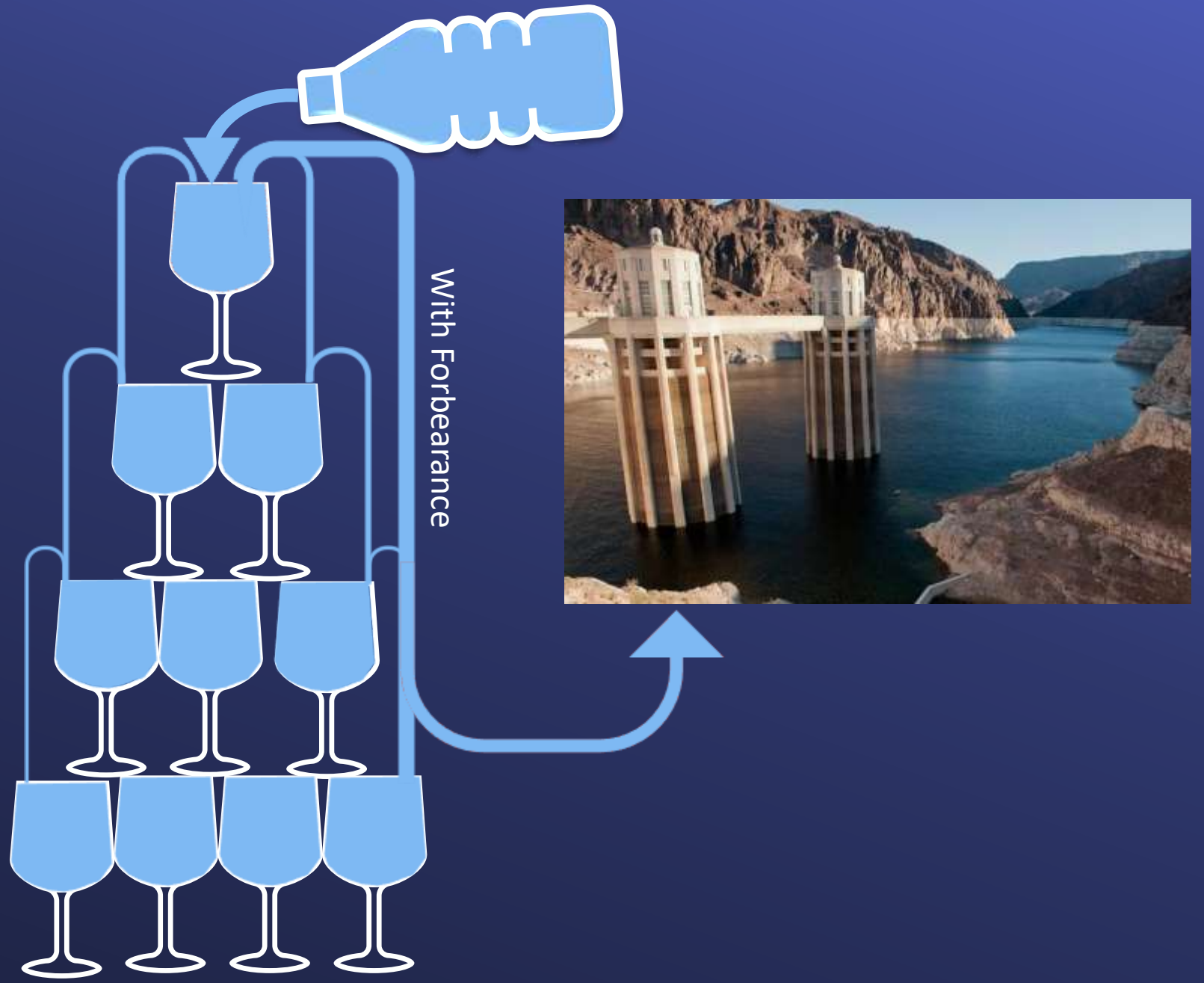
California Forbearance Agreement covering Bucket 1 LC Conservation Projects in 2024-2026

December 2024

CVWD developed two new LC Conservation Projects not covered by forbearance agreements

Item 7-7

Forbearance Allows Conserved Water To be Moved Out of Priority



Metropolitan's Forbearance is Necessary

Forbearance agreements are the mechanism for ensuring conserved water stays in Lake Mead under the priority system

Extension of Groundwater Replenishment Reduction in CVWD

Extend Existing Agreement through 2026

- Reduction in groundwater replenishment deliveries
- USBR to fund up to 35,000 acre-feet in 2026
- Verification through measured limited deliveries to Tom Levy Groundwater Recharge facility
  - ✓ No impact to MWD's Advanced Delivery Account

Tertiary Treatment in CVWD

Tertiary Treatment at Water Reclamation Plant (WRP) No. 4

- Increased reuse results in decreased demand for Colorado River water
- USBR to fund construction of tertiary treatment at WRP No. 4
- CVWD to provide 33,600 AF of conserved water to Lake Mead
  - Tertiary Treated water from WRP No. 4
  - Prepayment through other conservation efforts (like forgoing replenishment)

Board Options

- Option #1

Authorize the General Manager to forbear water conserved by two Coachella Valley Water District projects, thus allowing the conserved water to be added to Lake Mead under U.S. Bureau of Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program.

- Option #2

Do not enter into the forbearance agreement under the proposed terms.

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

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

3/11/2025 Board Meeting

8-1

Subject

Authorize an increase of the maximum amount payable under the contract with Richardson & Company LLP for auditing services related to State Water Project charges from $5,125,000 to an amount not to exceed $8,900,000 and extend the term by three years to March 31, 2028; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This letter seeks authorization to increase the maximum amount payable under a contract with Richardson & Company LLP (Richardson) by $3,775,000 and extend the term for three years to March 31, 2028, for the purpose of auditing Metropolitan's annual State Water Project (SWP) charges from the California Department of Water Resources (DWR). Additionally, this would allow Richardson to continue supporting staff in the recovery of claimed overcharges. The SWP audit benefits Metropolitan with cost savings, expenditure insight, and technical support.

Richardson & Company LLP and the predecessor firm Richardson and Company have audited Metropolitan's SWP charges for the last 34 years and, therefore, have a deep understanding of Metropolitan's operations and SWP contract. During that time, Richardson has identified errors and adjustments that reduced Metropolitan's charges by approximately $304 million. Metropolitan is currently negotiating additional unresolved errors of $234 million with DWR, including an estimated $170 million Water Systems Revenue Bond Surcharge item. Richardson also delivers detailed reports on the changes in Metropolitan's charges, the expenditures causing the changes, and provides technical support for protested charges and dispute resolution discussions.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Authorize an increase in the maximum amount payable under a contract with Richardson & Company LLP for auditing services related to State Water Project charges from $5,125,000 to an amount not to exceed $8,900,000 and extend the term by three years to March 31, 2028.

Fiscal Impact: Professional and technical services costs of up to $3,775,000 over a three-year period. These annual expenditures have been included in the approved budgets for FY 2024/25 and FY 2025/26.
Business Analysis: The auditing services provided by the consultant with expertise in auditing SWP contract charges assists staff in evaluating the accuracy of the charges and managing costs of Metropolitan's second largest annual expenditure.

Option #2

Do not authorize the contract increase with Richardson & Company LLP and instead direct staff to issue a Request for Proposals (RFP) for State Water Project charges audit services and return to the Board for authorization.

Fiscal Impact: Dependent on new contract
Business Analysis: This option would require issuance of an RFP and delay processing a new contract for SWP audit services, and could potentially result in higher audit costs.

Alternatives Considered

Staff evaluated if it is cost-effective to have the audit completed by internal audit staff or continue to use Richardson. Factors that were considered during the evaluation included an additional six to eight permanent full-time internal audit staff in Sacramento for approximately seven to nine months each year and the steep learning curve necessary to become proficient with the compliance review of a unique and technically complex computational process. The Office of the General Auditor voiced concurrence with the staff recommendation of Option #1.

Applicable Policy

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

Metropolitan Water District Administrative Code Section 8140: Competitive Procurement

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Related Board Action(s)/Future Action(s)

Not applicable

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it will not result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. (State CEQA Guidelines Section 15378(a).)

CEQA determination for Option #2:

None required

Details and Background

Background

Metropolitan contracts with an independent certified public accounting firm to audit each year's SWP charges billed by the DWR. The audit provides Metropolitan with an independent third-party opinion regarding the consistency of actual charges with the terms of the SWP Water Supply contract.

The audit is atypical for audited financial statements and requires a highly specialized contractual compliance review of a unique and technically complex computational process. The work location is in Sacramento, with the audit process requiring 6,300 to 6,700 hours per year, and a variable workload during the year. During the peak period, an experienced staff of 6 to 12 individuals perform the audit work.

Currently, there are only two consulting firms that have the SWP contractual and technical accounting knowledge to complete the audit, EY (formerly Ernst and Young) and Richardson. In 1990, as a result of a merger, EY completed the review for the audit charges for Metropolitan and the other State Water Contractors. However, in 1991, EY decided not to compete for Metropolitan's audit work due to the conflict-of-interest clause in the contract agreement. EY continues to audit the charges for other State Water Contractors through the Independent Audit Association. EY assisted Metropolitan in transitioning to a new firm. The new firm was Richardson & Company LLP.

Between 1991 and 2001, Metropolitan's consulting agreements were annual rollover agreements with a six-month termination notice. The agreements were consistent with Metropolitan's Administrative Code Section 8140(1)(h), which provides that all contracts estimated to cost $75,000 or more shall be made upon a competitive procurement method of either competitive sealed bidding or best value procurement, except contracts for insurance or for services of a professional, artistic, scientific, or technical nature, among others. From 2001 through 2019, Metropolitan sought audit services through four RFPs and one Request for Qualifications (RFQ). During each contracting cycle, the solicitation was broadened. The four RFPs and one RFQ did not result in identifying any accounting firms, other than Richardson, that are professionally and technically qualified, and have an interest in performing the Metropolitan SWP charges audit. In the 2009 solicitation process, Richardson was the only final respondent. In the 2012 and 2019 solicitation processes, Richardson was the only respondent.

There are a number of factors that reduce interest in responding to the SWP charges audit RFP. The most significant are the costs and risks associated with acquiring the specialized knowledge required to gain technical competency in the water resource industry. The conflict-of-interest clause within our agreements with Richardson prevents the consultant from leveraging its investment in knowledge by doing similar work for other water contractors and DWR. The large size of the audit, peak staffing requirements, and Sacramento location are also factors.

Given the ongoing protest and other disputed items, some related to cost reallocation among the SWP Contractors, it is crucial to maintain continuity with Richardson as the auditor. A loss of continuity with Richardson would slow the resolution process. A new consultant would require significant time and resources to reach the same level of competency.

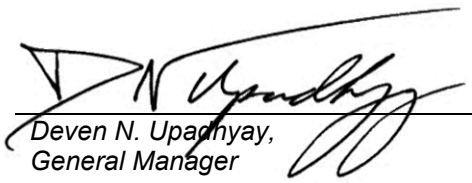
Before an audit service RFP is released, staff evaluates if it is better to have the audit completed by Metropolitan's internal audit staff or continue to use an external consultant. The Office of the General Auditor concurs that the use of an external consultant is the preferred choice.

Summary

The benefits of extending Metropolitan's consultant contract with Richardson include reduced staff costs associated with the RFP process, continued support for claims against DWR for errors in the calculation of the SWP charges, and continuation of reliable and efficient, low-cost audit services. The proposed contract amendment is consistent with Metropolitan's Administrative Code Section 8140(1)(h) because it involves the services of a professional and technical nature.

2/25/2025

Brandon J. Goshi *Date*
Interim Manager,
Water Resource Management



2/25/2025

Deven N. Upadhyay, *Date*
General Manager

Ref# wrm12704525

One Water and Adaptation Committee

Authorize Increase in the Richardson Contract Maximum Amount Payable & Extend Term

Item 8-1

March 10, 2025

Item 8-1
Authorize on contract with Richardson & Company

Subject

To increase the maximum amount payable under the contract with Richardson & Company, LLP for auditing services related to State Water Project charges from $5.1 million to an amount not to exceed $8.9 million and extend the term by three years to March 31, 2028

Purpose

Request authorization to increase the maximum amount payable and extend the Richardson contract term for the State Water Project auditing services

Recommendation

Authorize an amount payable of $3.8 million for a three-year contract extension with Richardson

Fiscal and Budget Impact

Cost of up to $3,775,000 over a three -year period. These annual expenditures have been included in the approved budgets for FY 2024/25 and FY 2025/26

Background

Richardson & Company LLP

Richardson Contract Audits the Accuracy of our State Water Project Charges

- Audits annual charges for over 30 years
  - Specialized contractual audit
  - Summary and detailed audit reports
  - Substantial cost savings over time
  - Provides expert technical support
- Current five-year contract ends March 31, 2025

Alternatives Considered

New Request for Proposal

- 2009, 2012, and 2019: Richardson was the final respondent
- New RFP: 4-6 months
- Steep learning curve

MWD General Auditor

- 6 to 8 full-time staff for ~ 7-9 months
- Steep learning curve

Extend Existing Contract

- Selected through the 2019 RFP process
- Industry experience
- Cost effective

Proposed Extension and Amount

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

FIRST AMENDMENT TO AGREEMENT NO. 195314

REVIEW OF THE ANNUAL STATE WATER PROJECT WATER SUPPLY CONTRACT CHARGES

This amendment to Agreement No. 195314, hereinafter referred to as First Amendment, is between THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, a public agency of the State of California, organized and existing under the Metropolitan Water District Act of the State of California, hereinafter referred to as Metropolitan, and RICHARDSON AND COMPANY LLP, hereinafter referred to as Consultant.

- Three-year contract extension
  - April 1, 2025 to March 31, 2028
  - Increase of approximately $3.8 million
    - Cost includes inflationary rate increase

- Additional scope:
  - Resolution of Water System Revenue Bond Surcharge claim
  - Settlement of other claims

Summary

- Request amending existing contract to increase the maximum amount payable and extend the agreement for three years
- Richardson is highly experienced, cost-effective, and an acknowledged industry expert
- The General Auditor concurs with the extension

Board Options

Option #1:

Authorize an increase in the maximum amount payable under a contract with Richardson & Company LLP for auditing services related to the State Water Project charges from $5,125,000 to an amount not to exceed $8,900,000 and extend the term by three years to March 31, 2028.

Board Options

Option #2:

Do not authorize the contract increase with Richardson & Company LLP and instead direct staff to issue a Request for Proposals (RFP) for State Water Project charges audit services and return to the Board for authorization.

Board Options

Staff Recommendation

Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

Water Resources Management Group

- **Water Surplus and Drought Management Update Conditions as of 2/5/2025**

Summary

This report provides the monthly update in accounting for water supply, demand, and storage conditions for calendar year (CY) 2025 as of February 5, 2025. This report also tracks the water year (WY) 2024-2025 hydrologic conditions. Updated supply and hydrologic information will be provided during the oral report in March.

On January 28, 2025, the California Department of Water Resources (DWR) increased the State Water Project (SWP) Table A Allocation from 15 percent to 20 percent due to improved hydrologic conditions observed in December. This brings Metropolitan's currently allocated SWP supplies to 383 thousand acre-feet (TAF). Further increases to the SWP allocation are expected and supported by improved hydrologic conditions that have not yet been reflected in the current allocation studies. Metropolitan's Colorado River supply is currently estimated at 781 TAF. This reflects (1) agreements that have been signed under the Lower Colorado River Basin System Conservation and Efficiency Program to leave water in Lake Mead; and (2) the United States Bureau of Reclamation's (USBR) daily forecast of water use for California's Colorado River water users for this year, which will change as the year progresses. Combining both supply estimates, Metropolitan's imported supply is estimated to be 1.16 million acre-feet (MAF) for CY 2025 at current allocation levels.

The demand on Metropolitan is currently estimated to be 1.45 MAF for CY 2025. Since supply is less than demand, there is a supply/demand gap of 289 TAF based on the current demand and supply estimates at the current allocation levels. Assuming no changes to the CRA supply and demand estimate, a final SWP allocation of 35 percent would be required to balance supply and demand without the need to utilize stored supplies. There is a significant likelihood indicated in the most recent SWP allocation studies that a 35% or greater final allocation will be attained. It is still early in the water year, and a wide range of supply and demand balances remain possible. Should supplies remain low, Metropolitan has sufficient dry-year storage available to satisfy a potential supply gap for CY 2025, including for the SWP Dependent Area.

Purpose

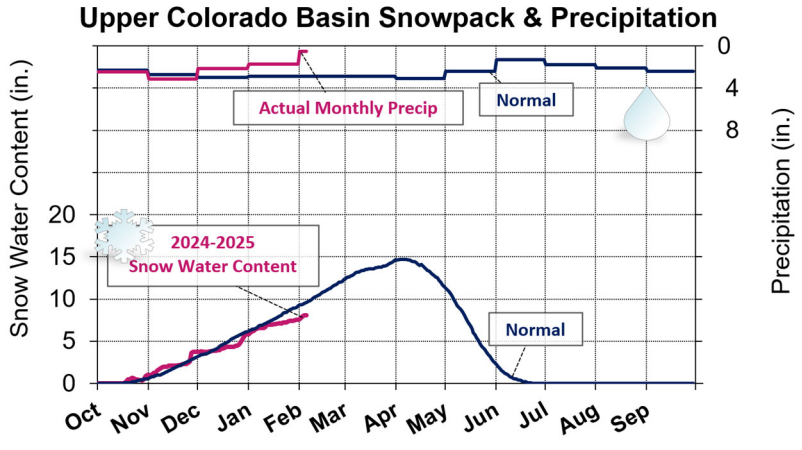
Informational

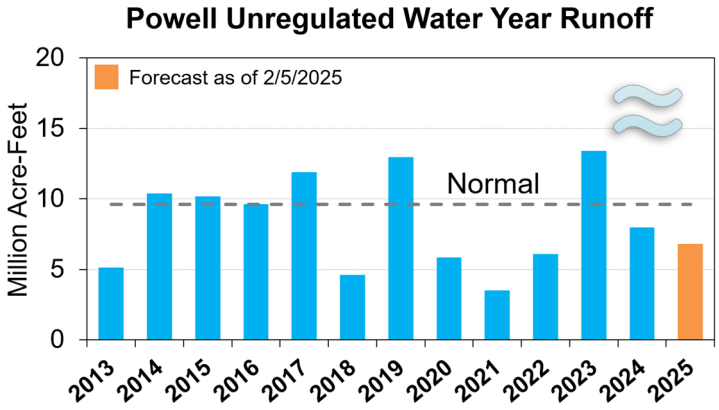
Attachments

Attachment 1: Projected 2025 WSDM Storage Detail (20 percent SWP Table A allocation)
Attachment 2: Future Contributions and Obligations and Cyclic Program

Detailed Report

This Water Surplus and Drought Management (WSDM) report provides the water supply and demand estimates for CY 2025 and developing hydrologic conditions for WY 2024-2025.



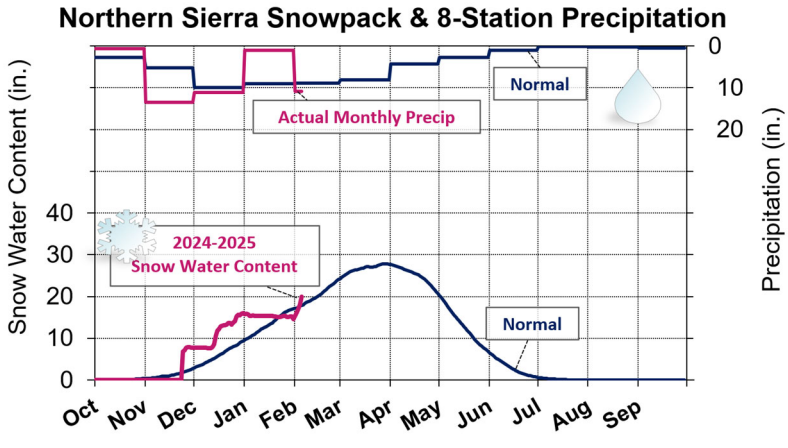


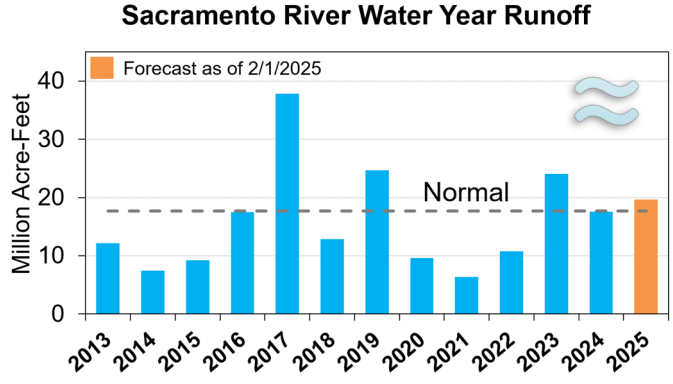
Upper Colorado River Basin

❄ Below normal snowpack water content for this date:
8.1 inches or 84% of normal.

💧 Below normal precipitation to date:
10.0 inches or 89% of normal.

≈ Below normal runoff forecast:
6.8 MAF or 71% of normal.





Sacramento River Basin

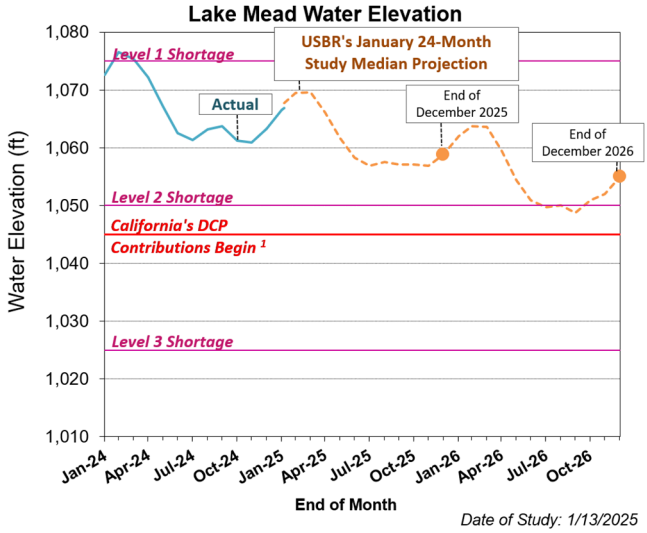
❄ Above normal snowpack water content for this date:
19.1 inches or 115% of normal.

💧 Above normal precipitation to date:
37.4 inches or 129% of normal.

≈ Above normal runoff forecast:
19.7 MAF or 112% of normal.

CRA Supplies	Acre-Feet
Basic Apportionment	*550,000*
IID/MWD Conservation Program	*105,000*
CVWD - 2nd Amendment, Exchange of Additional Water	*0*
PVID Fallowing Program [1]	*0*
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 [1]	*0*
Quechan Diversion Forbearance [1]	*0*
Quechan Seasonal Fallowing Program [2]	*0*
Higher Priority Water Use Adjustment	*-177,000*
Total CRA Supplies [3]	**781,000**

[1] Not a supply for Metropolitan in 2025. Water generated from these programs becomes system water as part of USBR's Lower Colorado Conservation Program to help protect Lake Mead.
[2] Rounded to the nearest thousand. Supply estimate is 270 AF.
[3] Per USBR Forecast (2/4/2025). Total may not sum due to rounding.

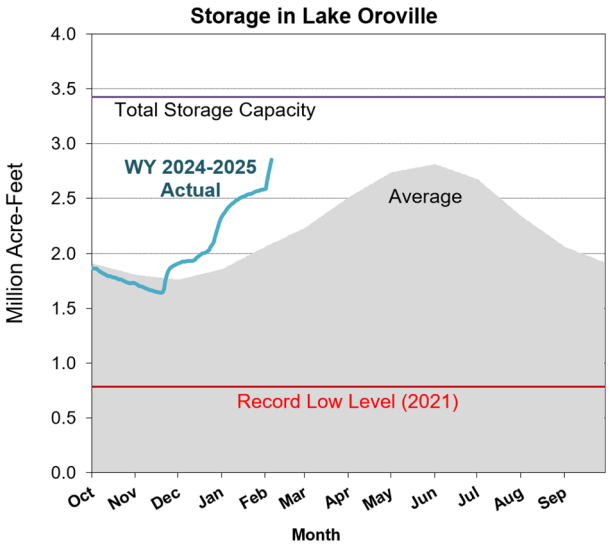


[1] Metropolitan is not required to make Drought Contingency Plan (DCP) contributions in 2025 because the August 2024 24-month Study projected Lake Mead's elevation to be above 1,045 feet on January 1, 2025. This figure reflects the latest 24-month study January 2025) available at the time of this report.

- Lake Mead storage is currently 8.95 MAF or elevation 1,066.9 feet (34 percent of total capacity).
- The Lower Basin is at a Level 1 shortage in CY 2025. Under this level, Metropolitan's operations and water supply are not impacted.

SWP Supplies	Acre-Feet
Table A (20% SWP allocation)	*382,000*
Port Hueneme [1]	*0*
Total SWP Supplies [2]	**383,000**
Total Supplies (CRA + SWP) (Prior to storage actions) [2]	**1,163,000**

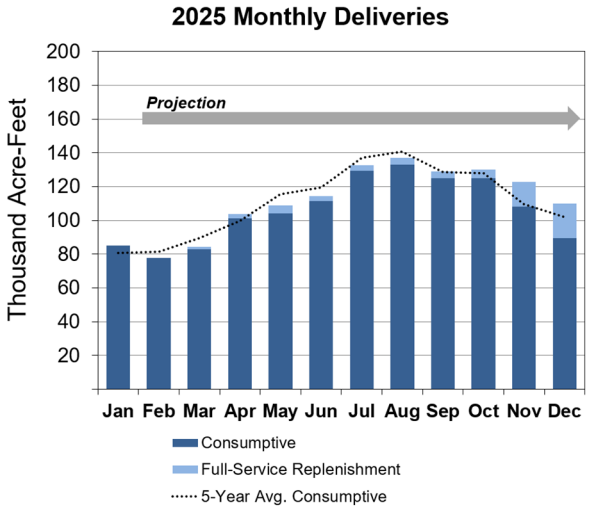
[1] Rounded to the nearest thousand. Supply is 370 AF.
[2] Total may not sum due to rounding.



- The SWP allocation for CY 2025 is currently 20 percent of Table A. Further increases to the SWP allocation are expected due to improved hydrologic conditions. The final allocation is typically determined in May or June.
- Lake Oroville is currently at 2.86 MAF (83 percent of total capacity) or 137 percent of historical average, as of the date of this report.

Current Demand	Acre-Feet
Member Agency Consumptive [1]	*1,309,000*
Member Agency Replenishment	*63,000*
Coachella Valley Water District Agreement	*15,000*
Imperial Irrigation District Return [2]	*0*
Exchange w/ San Luis Rey Tribe	*16,000*
System and Storage Losses	*50,000*
Cyclic Deliveries	*0*
Total Demands [3]	**1,453,000**

[1] Includes exchange w/ SDCWA (IID/Canal Lining) and CUP sales.
[2] Per USBR Forecast (2/4/2025).
[3] Total may not sum due to rounding.

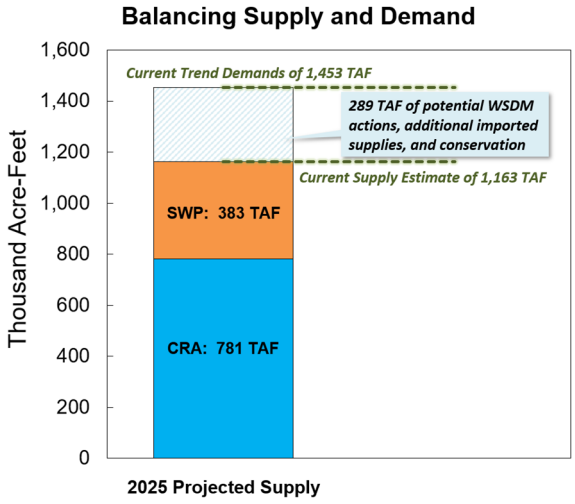


Member agency consumptive demands for CY 2025 are forecasted to be slightly below the 5-year average due to higher initial local supplies.

MANAGING REGIONAL SUPPLY AND DEMAND

Supply/Demand Balance	Acre-Feet
Total Supplies	*1,163,000*
Total Demands	*1,453,000*
Current Balance Estimate [1]	**-289,000**

[1] Total may not sum due to rounding.



WSDM Strategies/Actions

Metropolitan is monitoring supply development and updated demand projections. Appropriate WSDM actions will be taken to satisfy any supply/demand gap. Even with the current low SWP Allocation, Metropolitan has sufficient dry-year storage available to satisfy the current projected supply gap for CY 2025, including for the SWP Dependent Area.

2025 WSDM Storage Detail

WSDM Storage	1/1/2025 Estimated Storage Levels [1]	CY 2025 Take Capacity [2]	2025 Total Storage Capacity
Colorado River Aqueduct Delivery System	**1,596,000**	**299,000**	**1,622,000**
Lake Mead ICS	1,596,000 [3]	299,000 [4]	1,622,000 [3]
State Water Project System	**1,163,000**	**685,000**	**2,328,000**
MWD & DWCV Carryover	380,000	380,000	519,000 [5]
MWD Articles 14(b) and 12(e)	3,000 [6]	3,000	0
Castaic and Perris DWR Flex Storage	219,000	219,000	219,000
Arvin-Edison Storage Program	100,000	0	350,000
Semitropic Storage Program	227,000	51,000	350,000
Kern Delta Storage Program	142,000	32,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
AVEK High Desert Water Bank Program	45,000	0	280,000
In-Region Supplies and WSDM Actions	**1,060,000**	**645,000**	**1,246,000**
Diamond Valley Lake	788,000	531,000	810,000
Lake Mathews and Lake Skinner	188,000	76,000	226,000
Conjunctive Use Programs (CUP)	84,000	38,000	210,000 [7]
Other Programs	**762,000**	**48,000**	**1,181,000**
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	381,000	48,000	800,000
Total	**4,581,000**	**1,676,000**	**6,377,000**
Emergency	750,000	0	750,000
Total WSDM Storage (AF) [8]	**3,831,000**	**1,676,000**	**5,627,000**

[1] Preliminary start of year balances, subject to DWR adjustments and USBR final accounting in May 2025.

[2] Take capacity assumed under a 20 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 and current CRA supply estimate.

[5] Total storage capacity varies year-to-year as the contractual annual storage limit, based on the SWP Table A allocation, is combined with the remaining balance from the previous year. There is a potential risk that Metropolitan's stored water be converted to SWP contractor water if San Luis Reservoir approaches full capacity.

[6] DWR has approved carryover supplies under Article 14 (b) of the State Water Project Contract for delivery in 2025.

[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. Total may not sum due to rounding.

Future Contributions and Obligations and Cyclic Programs

Table 1: Future Obligations [1]

	Beginning of Year 2025 Balance
Water Stored for IID under the California ICS Agreement and its Amendment or the 2021 Settlement Agreement with IID	258,000 [2]
Storage and Interstate Release Agreement with Southern Nevada Water Authority (SNWA)	330,000 [3]
Coachella Valley Water District Agreement	70,000 [4]
United States Bureau of Reclamation (USBR) Phase 2 of the Lower Colorado River Basin System Conservation and Efficiency Program	269,000 [5]
Total (AF) [6]	**927,000**

[1] Rounded to the nearest thousand AF. Subject to change based on accounting adjustments. In the last WSDM report, the Reverse Cyclic Program was mischaracterized as a future obligation. This program does not create an additional obligation or future demand on Metropolitan and has been removed from the table of Future Obligations.

[2] Reflects final accounting under USBR's 2023 Water Accounting Report released May 15, 2024. IID can request a return in any year, conditional on agreement terms.

[3] SNWA may request up to 30,000 AF per year.

[4] Obligation must be met by the end of 2026.

[5] USBR will provide federal funding to Metropolitan for the AVEK HDWB System Conservation Project, Turf Replacement System Conservation Project, and Disadvantaged Communities Leak Detection and Repair Program. In exchange, Metropolitan will implement the projects and create conserved water to benefit Lake Mead as system water. 265,000 AF of the obligation must be met by 2033 and 4,000 AF must be met by 2034.

[6] Total may not sum due to rounding.

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

	2025	2026
Likelihood of Required California Drought Contingency Plan Contribution [1]	0%	0%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	0

[1] Results from USBR's December 2024 Colorado River Mid-Term Modeling System (CRMMS) model run. January study not available at the time of this report.

Table 3: Cyclic Program Activity [1]

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 to Date	
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	24,000	33,000	14,000	48,000	72,000	0
2024	0	97,000	0	97,000	25,000	72,000
2025	72,000	0	0	0	0	72,000

[1] This table is updated with actual Cyclic Program activity reflecting certifications through December 2024. Total may not sum due to rounding.

One Water and Adaptation Committee

Update on Water Surplus and Drought Management

Item 6a
March 10, 2025

Item 6a Update on WSDM

Subject

Update on Oral Report on Water Surplus and Drought Management

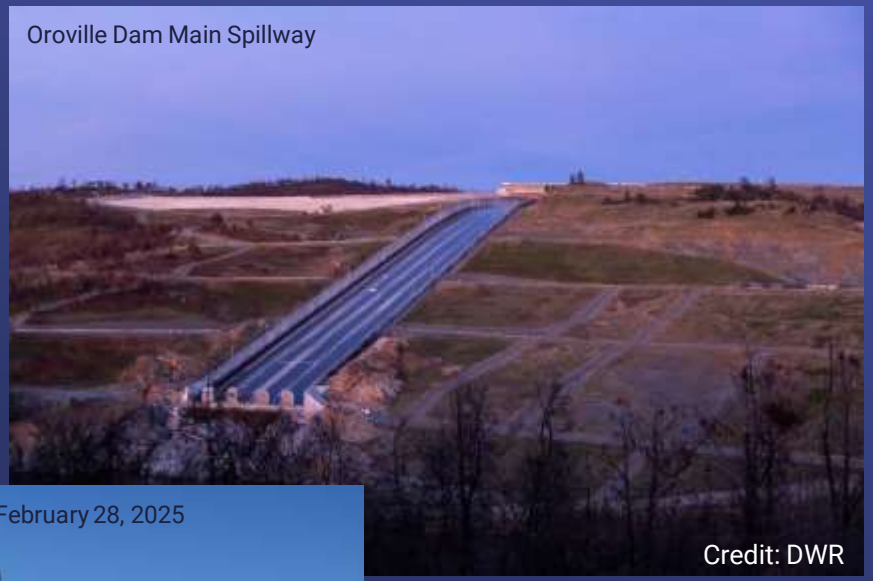
Purpose

Provide updated supply and hydrologic information

SWP Supply Outlook Continues to Improve

SWP Table A Allocation increased from 20% to 35%

- Early February storms boosted hydrologic conditions in Northern Sierra
- SWP storage tracking above Department of Water Resources (DWR) projections



Oroville Dam Main Spillway

Credit: DWR

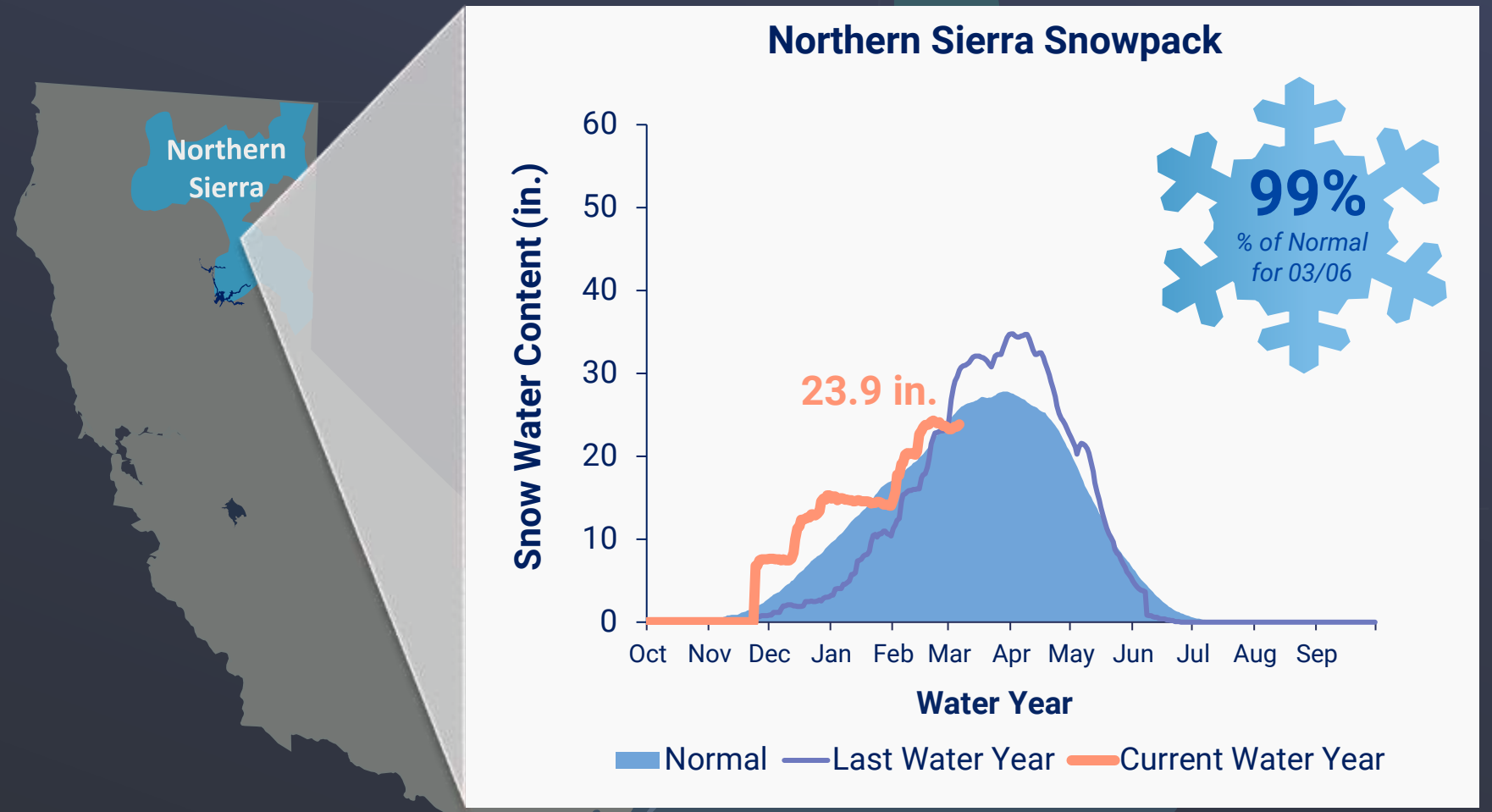
DWR media snow survey at Phillips Station. February 28, 2025

Hydrologic Conditions Summary

Northern Sierra 8-Station Index Precipitation		Northern Sierra Snowpack		Upper Colorado River Basin Precipitation		Upper Colorado River Basin Snowpack	
44.2 in.	117%	23.9 in.	99%	13.3 in.	92%	11.5 in.	89%
Value as of 03/06	% of Average	Value as of 03/06	% of Average	Value as of 03/06	% of Average	Value as of 03/06	% of Average

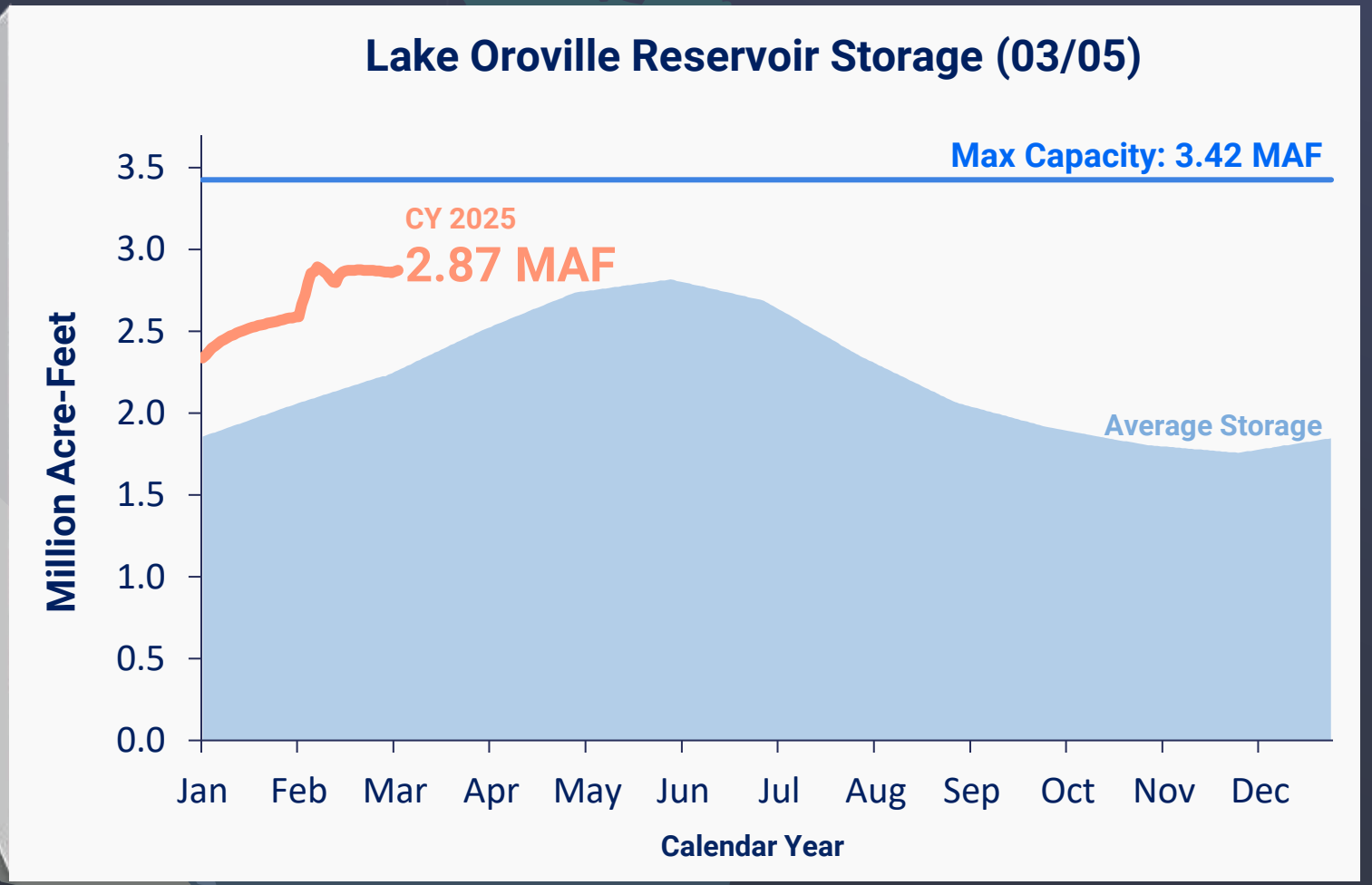
Note: Images not drawn to scale. Storage data as of 03/05/2025

Average Snowpack in Northern Sierra



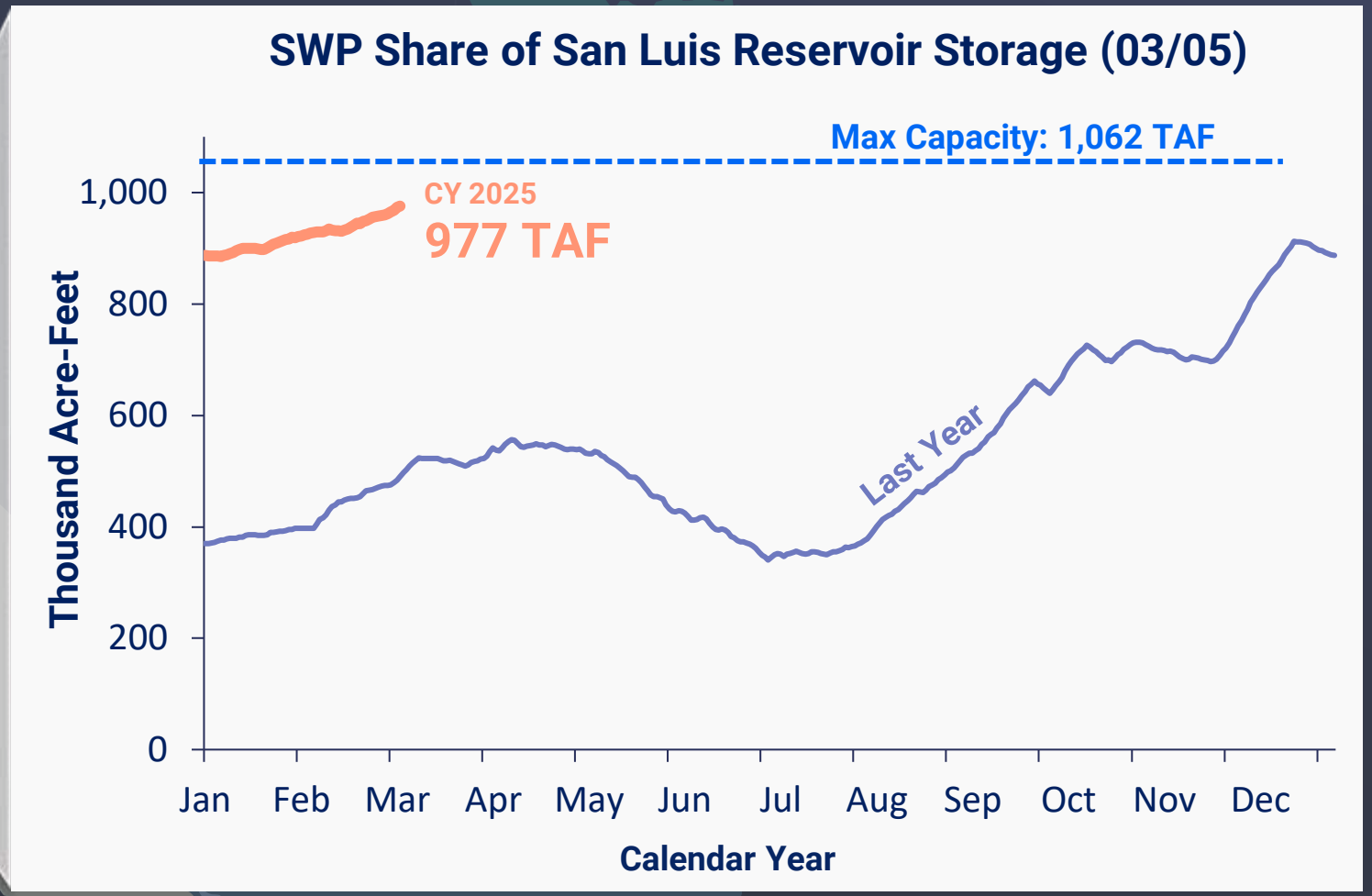
Note: Images not drawn to scale.

Lake Oroville Storage Remains High



Note: Images not drawn to scale.

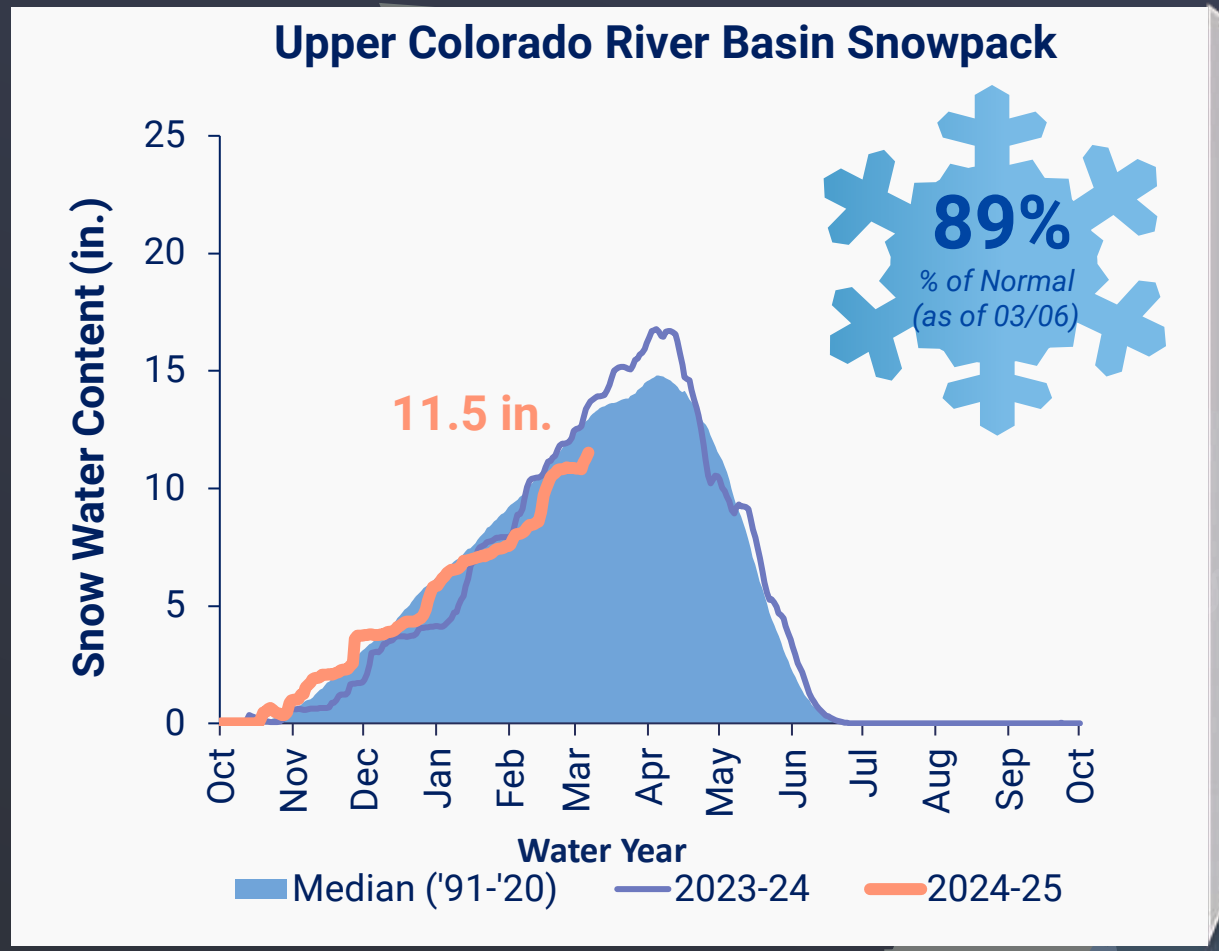
Gradual Increase in SWP San Luis Storage

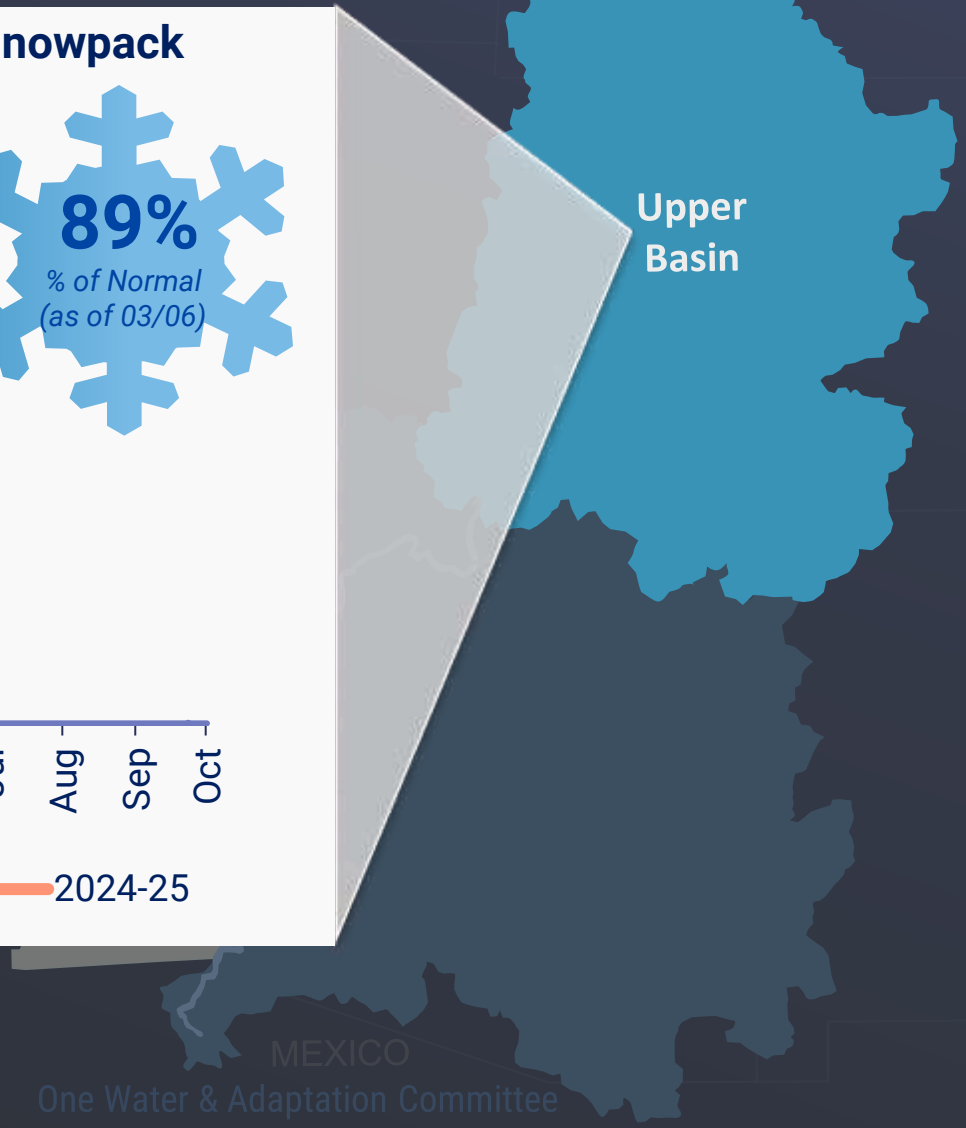


MEXICO

Note: Images not drawn to scale.

Below Average Upper Colorado River Basin Snowpack

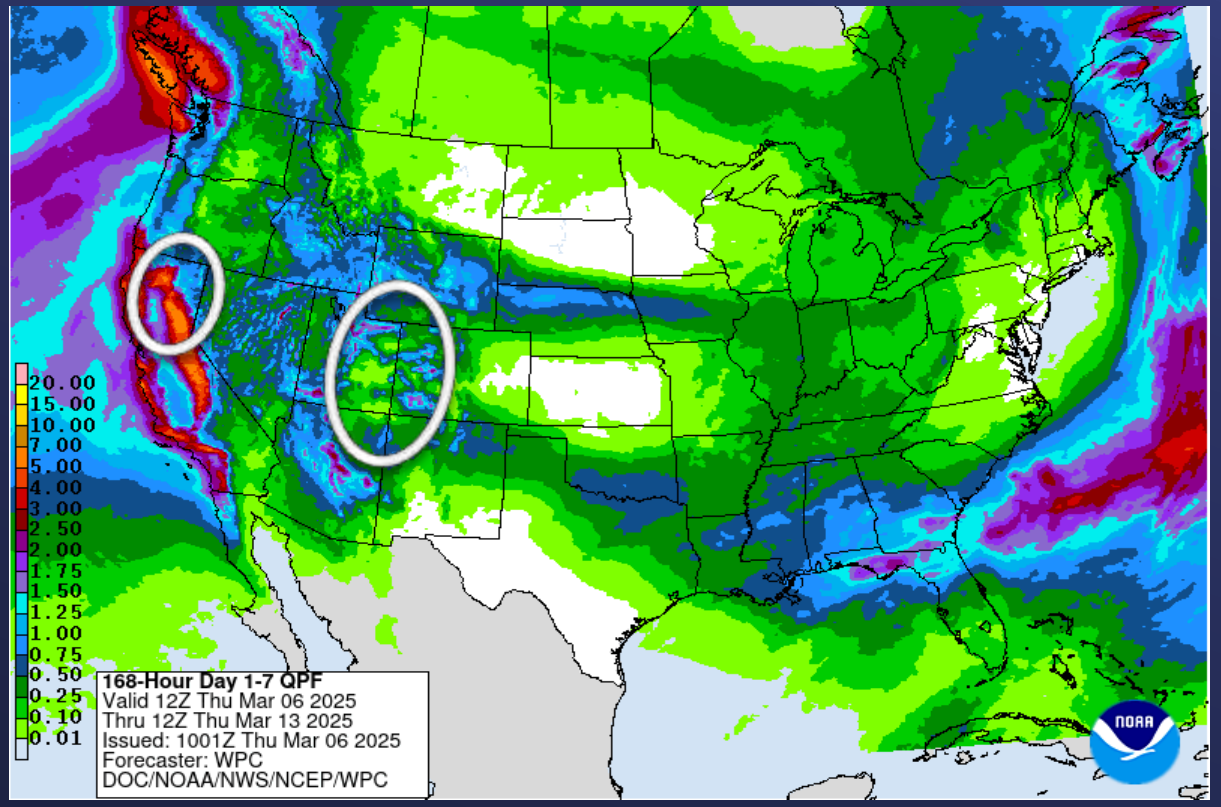




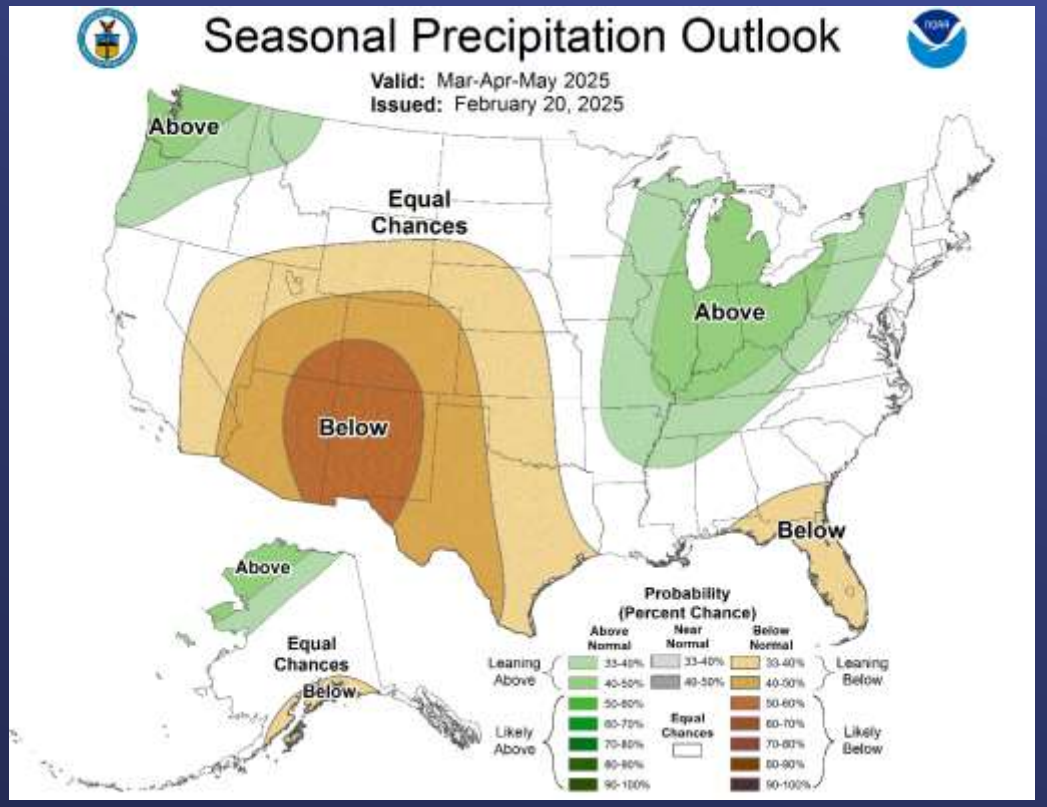
Note: Images not drawn to scale.

Precipitation Outlook

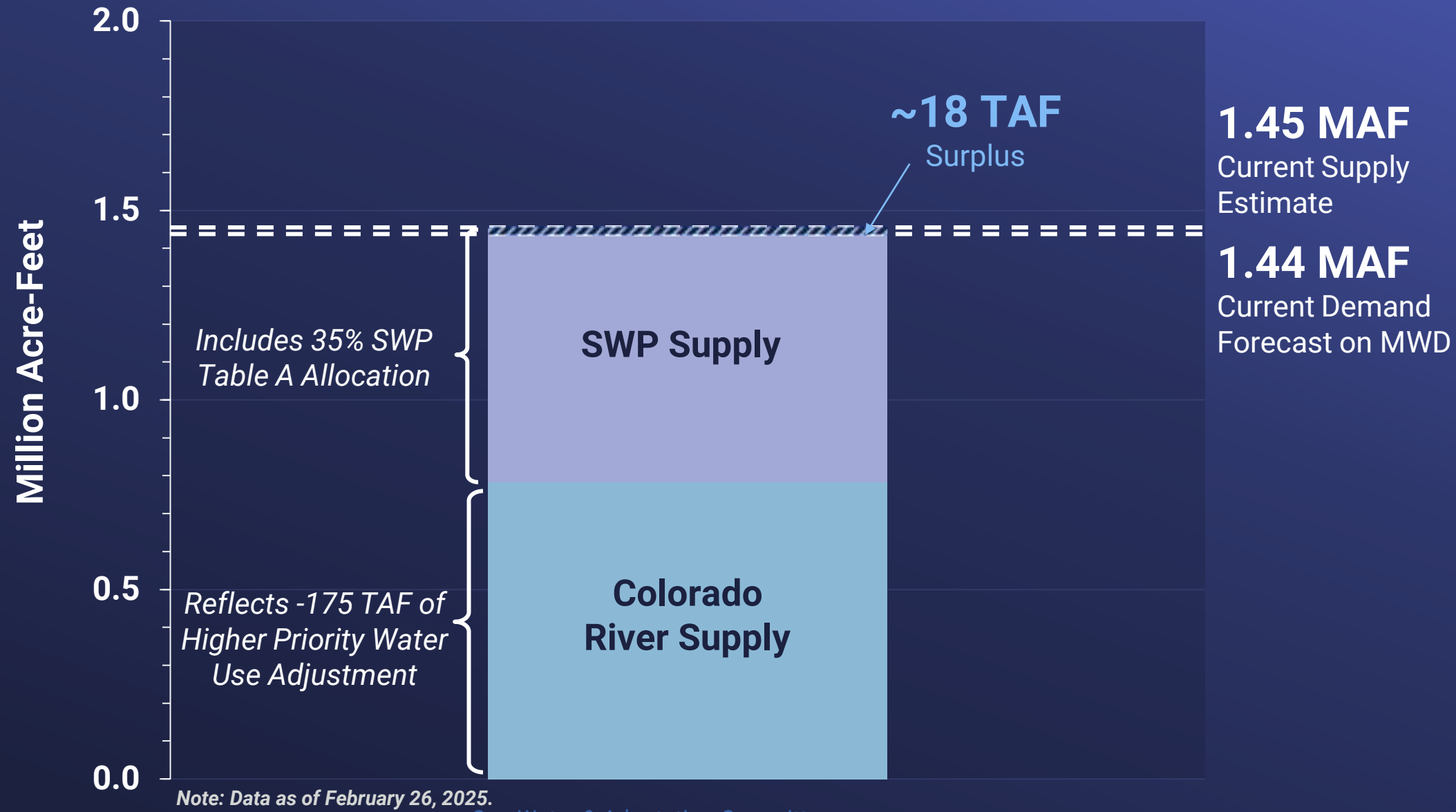
Mar 6 - Mar 13



Mar-Apr-May Outlook



2025 Water Supply/Demand Balance: Regional View



Note: Data as of February 26, 2025.


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

Sustainability, Resilience and Innovation Group

- **Palo Verde Valley Land Ownership Analysis**

Summary

Metropolitan owns 29,958 acres in Palo Verde Valley and the adjacent mesa, of which 21,764 acres are irrigable farmland – about 23 percent of the irrigable acreage in the Valley. The irrigable acreage is currently leased to five tenants who have a history of farming in the area. This report describes the history of Metropolitan's land acquisitions and farm leases, and quantifies the financial and water supply benefits from owning these lands. It also describes the indirect benefits that Metropolitan receives, such as voting rights, community partnerships, research opportunities, and environmental compliance.

Purpose

Informational

Attachments

White Paper – Benefits of Metropolitan's Land Ownership in the Palo Verde Valley

Detailed Report

See attachment.

Benefits of Metropolitan's Land Ownership in the Palo Verde Valley

March 2025

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Executive Summary

The Palo Verde Valley is a farming community of about 19,000 people and 94,000 irrigable acres located along the Colorado River in southeast California. The Valley is served by the Palo Verde Irrigation District (PVID), which holds senior priority rights to Colorado River water and annually uses ~280–430 thousand acre-feet in recent years.

PVID's water rights are unquantified, although these rights are restricted by the acreage of land that can be irrigated. Under the provisions of 2003 Quantification Settlement Agreement, PVID's annual use affects Metropolitan's junior priority entitlement. Recognizing this, Metropolitan has partnered to manage water use in the Valley, including developing the PVID–MWD Fallowing Program in the early 2000s and purchasing lands when the opportunity has arisen in 2001, 2015, and 2022. Metropolitan now owns 29,958 acres in Palo Verde Valley and the adjacent mesa, of which 21,764 acres are irrigable farmland (as determined by PVID) – about 23% of the irrigable acreage in PVID. The irrigable acreage is currently leased to five tenants who have a history of farming in the Valley.

In this white paper, we report on the benefits Metropolitan has derived and continues to derive from owning land in the Palo Verde Valley. These include quantifiable financial and water supply benefits:

1. Revenues from farm leases, conservation easements, powerline easements, and potential renewable energy leases
2. Savings from being able to fallow Metropolitan-owned farmland at reduced cost
3. Water savings on farmed acreage that are incentivized by the rent structure of the farm leases
4. Recent payments from the Bureau of Reclamation for system water conservation

Metropolitan also receives a number of indirect benefits:

5. PVID voting rights, which are based on acreage owned
6. Participation in studies related to regenerative farming, soil health, and new irrigation technologies with the potential to reduce water use
7. Participation in the Lower Colorado River Multi-Species Conservation Program
8. Long-term supply reliability after the existing Fallowing Program expires

We attempt to quantify these benefits where possible, and also provide a history of the land acquisitions, farm leases, fallowing, cropping, and water use on Metropolitan lands. Table 1 provides a summary of the financial and water supply benefits.

Ownership of the Palo Verde Valley lands provides Metropolitan with a permanent basis for implementing water conservation measures. Nearly all irrigable acreage is under long-term leases that incentivize farmers to plant lower-water-using crops, while still providing them flexibility to make market-driven cropping decisions. Most leases have the option to extend until the Fallowing Program expires in 2040, at which point the landholdings would have strategic long-term value for any future agricultural and water supply programs.

Metropolitan also owns 6,700 non-irrigable acres on the Palo Verde Mesa which is outside the PVID service area but nonetheless includes voting rights. This land is currently under an option to lease agreement to potentially develop a large-scale renewable energy project that would provide additional rental revenues.

Finally, owning land provides an opportunity for Metropolitan to partner with its farm tenants and with the Palo Verde agricultural community at large, exploring opportunities that can provide both economic and water supply benefits.

Cutting alfalfa on Metropolitan's farmlands in northern Palo Verde Valley (photo by Metropolitan)

Table 1. Summary of all costs, revenues, and water savings from Palo Verde Valley lands

Land acquisition costs						
2001 – SDG&E		$41.4	M	16,438	acres	
2015 – Purple Verbena		$255.6	M	12,819	acres	
2022 – Cox Family Farms		$9.4	M	701	acres	
	=	**$306.4**	**M**	**29,958**	**acres**	**(21,764 irrigable)**
Easements and other one-time revenues						
Underwood Reserve conservation easement to USBR		$9.7	M	one-time		
Ten West powerline easement		$0.31	M	one-time		
Reclamation payments for system conservation		$36.3	M	one-time		2024-26 IRA Bucket 1 program
	=	**$46.3**	**M**	**one time**		

Annual lease revenues	High call		Low call			
Farm leases	**$1.6**	–	**$4.8**	**M**	**per year**	(depends on fallowing call)
Avoided costs of fallowing Metropolitan lands						
	$3.1	–	**$1.2**	**M**	**per year**	(depends on fallowing call)
Water savings on farmed acreage						
Water savings on MWD land	0.10	–	0.25		AF/acre per year	(depends on markets and cropping)
× Farmed (unfallowed) acres	14,014	–	19,827		acres	(depends on fallowing call)
= Total water savings	1,401	–	4,957		AF per year	(depends on fallowing call)
× Replacement value of CR water			$400		per AF	IRA Bucket 1 rate
= Total value of water savings	**$0.6**	–	**$2.0**	**M**	**per year**	(depends on fallowing call)
Total annual benefits	**$5.3**	–	**$8.0**	**M**	**per year**	Includes lease revenues, avoided fallowing costs, and water savings
Potential future lease revenues						
Potential revenue from renewables	**$2.5**	–	**$5.0**	**M**	**per year**	Future solar / battery storage leases

Introduction—The Law of the Colorado River

The Palo Verde Valley is a farming community of about 19,000 people and 94,000 irrigable acres located along the Colorado River in southeast California. The Valley is served by the Palo Verde Irrigation District (PVID), which holds senior priority rights to Colorado River water and annually uses ~280–430 thousand acre-feet in recent years. Forage crops (alfalfa, annual grasses), wheat, and cotton account for more than two-thirds of the crops in the Valley, with a small amount of produce crops. Irrigation water is supplied entirely by the Colorado River through a network of gravity-flow canals and ditches, and unused water is returned to the river through a series of drains.

Colorado River water rights are governed by a complex set of federal statutes, an interstate compact, an international treaty, U.S. Supreme Court decrees, and numerous contracts, collectively referred to as the Law of the River. California's entitlement in normal years is 4.4 million acre-feet (MAF). Pursuant to the 1931 Seven Party Agreement among California water agencies, the first three priorities, up to 3.85 MAF per year, are assigned to four agricultural areas: Palo Verde Irrigation District (PVID), Yuma Reclamation Project (Yuma Project), Imperial Irrigation District (IID), and Coachella Valley Water District (CVWD). Metropolitan holds the rights to the remaining 550,000 AF through its Priority 4 entitlement. In its 1963 ruling in *Arizona v California*, the U.S. Supreme Court held that pre-1928 present perfected rights (e.g. water rights for Tribal reservations) must be satisfied before water is delivered to holders of water delivery contracts issued under the 1928 Boulder Canyon Project Act.

Prior to 2001, Metropolitan's full Colorado River Aqueduct capacity (~1.2 MAF per year) was filled with its basic apportionment plus water apportioned to but not used by Arizona and Nevada. But with the operation of the Central Arizona Project in the 1990s, unused water became scarce, and in 2001, the Secretary of the Interior adopted new interim guidelines determining when surplus would be made available. To help California reduce its use of Colorado River water, several California agencies entered into the Quantification Settlement Agreement (QSA) in 2003.

The QSA limits the third priority rights held by IID and CVWD to a combined total of 3.43 MAF per year. The QSA assumed that the Priority 1, 2, and 3b use by PVID and the Yuma Project

averaged 0.42 MAF (the combined 3.43 and 0.42 amounts equal the agricultural priority total of 3.85 MAF). By quantifying IID and CVWD, the QSA allows Metropolitan to take delivery of additional water when PVID and Yuma fall below the 0.42 MAF amount. Metropolitan also agreed in the QSA that its deliveries would be reduced by the amount that PVID and Yuma exceed 0.42 MAF in any year, and by the amount that present perfected rights exceed 11,500 acre-feet in any year. Thus, Metropolitan's water supplies remain contingent on the water used by PVID, the Yuma Project, other Indian Tribes, and present perfected rights, in addition to transfers from IID and CVWD. For that reason, Metropolitan has taken actions to cooperatively address or manage the Colorado River water use in PVID.

Prior to 2001, PVID and the Yuma Project together used an estimated 420,000 acre-feet per year, on average. After 2001, PVID and Yuma's combined use increased, and in both 2013 and 2014 the districts used over 480,000 acre-feet. Because PVID's water use is calculated as diversions minus return flows, it is the water actually consumed by crops and field evaporation (the consumptive use) that affects the amount of water available to Metropolitan.

In summary, the amount of Colorado River water available to Metropolitan remains contingent on the water use of PVID, the Yuma Project, and certain holders of Present Perfected Rights (in addition to Metropolitan's own water management actions). As a result of this dependency, Metropolitan became involved in the water use and conservation in PVID in the early 2000s. PVID and Metropolitan established the Fallowing Program to conserve water beginning in 2005. At the same time, opportunities came up to acquire farmland within PVID to allow Metropolitan to work directly with farmers and incentivize water conservation.

The PVID Land Management, Crop Rotation and Water Supply Program (Fallowing Program)

A view across fallowed fields on Metropolitan's farmlands in northern Palo Verde Valley

Background

In 2002, Metropolitan's Board authorized agreements for the PVID Land Management, Crop Rotation and Water Supply Program (Fallowing Program). The board letter estimated the program would provide Metropolitan between 25,000 to 111,000 AF of water per year, depending on the fallowing call of 25–100%. The program was informed by lessons learned during a pilot fallowing program with PVID in 1992–94.

Agreements

Two types of agreements were executed: Landowner Agreements with participating landowners, and a Forbearance and Fallowing Program Agreement with PVID. The agreements established a 35-year program (2005–39) whereby landowners would not irrigate a portion of their land per Metropolitan's fallowing call notice, thus reducing PVID's diversion of Colorado River water. The saved water would then be available for Metropolitan's use.

Landowner Agreements

The Landowner Agreements allowed landowners to enroll up to 35% of their irrigated acreage into the program, as long as they could show a recent history of irrigation. This was a one-time limit designed to meet CEQA acreage limits. Landowners received a sign-up payment of $3,170 per enrolled acre, which was close to the purchase price of land at the time.

During the sign-up period, the program reached the CEQA-approved limit of 26,500 acres. One landowner ultimately withdrew their interest, reducing the maximum enrolled acreage to 25,947 acres. A total of 93 Landowner Agreements were fully executed. Metropolitan is also a participating landowner in the Fallowing Program.

The Landowner Agreement is a 35-year agreement, from 2005 through 2039. Each year, Metropolitan makes a fallowing call between 25% and 100%, which determines the number of acres to be fallowed, up to the 25,947-acre limit. Landowners fallow a proportionate amount of their enrolled acreage and are compensated per acre.

Landowners are required to maintain the fallowed land at their own cost and in accordance with approved soil and water management plans. They are responsible for tax payments, PVID water toll payments, vegetation abatement, dust control, and all other costs related to the fallowed land.

Forbearance and Fallowing Program Agreement with PVID

The Forbearance and Fallowing Program Agreement between Metropolitan and PVID outlines PVID's responsibilities in managing the program. PVID agreed to forbear diversions of Colorado River water that otherwise would have been used to irrigate fallowed lands, such that water saved from the fallowing of land will then be available for diversion by Metropolitan. PVID provides Metropolitan with data on District-level water use and cropping necessary to calculate savings from the Fallowing Program. In turn, Metropolitan agreed to reimburse PVID for its administrative costs in managing the program and verifying compliance through field inspections. In addition, Metropolitan agreed to establish a $6M Community Improvement Fund intended to help offset third-party impacts from fallowing.

Upfront Fallowing Program Costs

Metropolitan's upfront costs included (1) sign-up payments of $73.5M, (2) the $6M Community Improvement Fund, and (3) setup costs of $3.3M (preparing legal descriptions of the fallowing easements).

Fallowing on Metropolitan Lands

Metropolitan's own lands are enrolled in the Fallowing Program and are typically fallowed at the same call percent as other landowners. Up to 7,750 acres of Metropolitan's 21,711 irrigable acres (~36%) may be fallowed at any one time.

However, as the landowner, Metropolitan does not issue fallowing payments to its tenants, meaning that these lands can be fallowed at a substantially lower cost. The tenants are reimbursed their rent and water tolls and paid a small land maintenance fee.

Landowner Payments

The annual payment rate per acre is defined in the Landowner Agreements. During the first ten years, rates escalated by a fixed 2.5% per year. Escalation is currently based on the Consumer Price Index, with a minimum of 2.5% and a maximum of 5%. Table 2 shows the payment rates since the beginning of the program.

Table 2. Metropolitan fallowing payment rates

Contract Year	$ / Fallowed Acre	Unit Cost ($/AF)
2005-06	$602.00 / acre	$142 / AF
2006-07	$617.05	$126
2007-08	$632.48	$128
2008-09	$648.29	$130
2009-10	$664.50	$153
2010-11	$681.11	$147
2011-12	$698.14	$141
2012-13	$715.59	$149
2013-14	$733.48	$141
2014-15	$751.82	$157
2015-16	$770.62	$145
2016-17	$789.89	$176
2017-18	$809.64	$164
2018-19	$832.31	$183
2019-20	$864.77	$219
2020-21	$887.25	$190
2021-22	$909.44	$192
2022-23	$954.90	$217
2023-24*	$1,002.65	TBD

Total amount paid to Landowners (2005–24): $257M
*Includes funds for System Conservation Water

System Conservation Water

In June 2021, Metropolitan's Board authorized an agreement with the Bureau of Reclamation (Reclamation), Central Arizona Water Conservation District, and the Southern Nevada Water Authority to cost share up to 50% of land fallowed under the Fallowing Program at the payment rate defined in the Landowner Agreement (these lands were not needed to meet Metropolitan's water supplies). Through this agreement, approximately 103 TAF of system conservation water was stored in Lake Mead from August 2021 through July 2023.

Lower Colorado System Conservation Program

In December 2023, Metropolitan's Board authorized an agreement with Reclamation for system conservation projects under the Lower Colorado River Basin System Conservation and Efficiency Program (LC System Conservation Program). Instead of Metropolitan paying for the Fallowing Program, Reclamation would pay for the land fallowing for three Contract Years, starting in August 2023. The water conserved would become system conservation water in Lake Mead.

Under this program, the payment for the land fallowing is higher than Metropolitan's normal Fallowing Program rate: all participating landowners, including Metropolitan itself, are paid at the higher rate of $385 per acre-foot with Reclamation funds. Table 3 shows the acres fallowed and payments to the participating landowners and to Metropolitan for the three Contract Years.

It should be noted that as of the time of writing in February 2025, there is currently uncertainty around whether these payments, which are part of the Inflation Reduction Act, may be withdrawn by future Congressional action or delayed by the new federal administration.

Table 3. Acres fallowed and payments under the Lower Colorado System Conservation Program

	Acres	2023–24	2024–25	2025–26
Landowners	18,197	$28.3M	$28.4M	$28.5M
Metropolitan	7,750	$12.0M	$12.1M	$12.2M

Water Conserved via the Fallowing Program

Each calendar year, PVID, Metropolitan and Reclamation jointly prepare a Fallowed Land Verification Report to estimate the amount of water saved by the Fallowing Program. The report becomes part of Reclamation's Colorado River Accounting and Water Use Report.

Table 4 summarizes the total and per-acre water conserved for each calendar year, while Table 5 summarizes the total payments and water saved to date from the Fallowing Program.

Table 4. Estimated water conserved through the Fallowing Program, by year

Calendar Year	Water Saved (AF)	Water Saved (AF per Acre)
2005	108,646 AF	--
2006	100,384	5.05 AF/acre
2007	72,310	4.92
2008	94,302	5.11
2009	144,323*	4.63
2010	148,615*	4.48
2011	122,217	4.73
2012	73,662	4.66
2013	32,750	5.04
2014	43,010	5.13
2015	94,477	5.29
2016	125,432	4.83
2017	111,788	4.46
2018	95,572	4.90
2019	44,477	4.29
2020	43,858	4.23
2021	54,610	4.60
2022	82,657	4.58
2023	87,256	4.09

* Includes emergency fallowing

Table 5. Total landowner payments and water saved from the Fallowing Program to date

Program term	Acres enrolled	Min/Max fallowing call	Cost through 2024	Estimated water savings
2005–39	25,947	25%–100%	$257M	1.685 MAF

History of Land Acquisitions

Current Metropolitan Land Holdings

Metropolitan is currently the largest landowner in the Palo Verde Valley, owning approximately 29,958 gross acres of fee property. 22,562 acres of those lands have active farm leases; the remaining lands include 635 acres encumbered with a conservation easement granted to Reclamation as part of the Lower Colorado River Multi-Species Conservation Program, and 6,742 acres of unencumbered, non-irrigated land on the Palo Verde Mesa currently under an option to lease agreement for a potential large-scale renewable energy project.

Metropolitan's lands were acquired in three purchases (Table 6; Figure 1). One of these purchases included both irrigable and non-irrigable land. In PVID, irrigable acres eligible to receive water are referred to as "water toll acres" (WTA).

2001 — Purchase of SDG&E Property

In 2001, Metropolitan purchased 16,438 acres of land from San Diego Gas & Electric Company (SDG&E), including 9,696 acres (8,997 WTA) of irrigable lands in the Palo Verde Valley and 6,742 acres of land on the Palo Verde Mesa. The Palo Verde Mesa is outside the PVID service area and therefore has no water toll acres but does have voting rights as it is within the sphere of influence of the district. The SDG&E land was intended for use as an electric generating plant that was never constructed. Metropolitan's cost to purchase this land in 2001 was $41.4 million ($2,519 per acre). The relatively low cost reflects the non-irrigable acreage included in the purchase.

2015 — Purchase of Verbena Property

When Metropolitan implemented the Fallowing Program in 2005, the largest landowner in the Palo Verde Valley was Farmland Reserve, Inc., a Utah nonprofit corporation, with holdings of about 12,819 acres. Farmland Reserve enrolled its lands in the Fallowing Program and had a maximum fallowing obligation of 4,220 acres. In 2011, Farmland Reserve sold most of the lands to Verbena LLC and assigned the fallowing contract to them. Verbena then made several efforts to transfer the water used on the Palo Verde lands to water districts in the San Joaquin Valley. Verbena proposed to Metropolitan that it would take the land out of

production if Metropolitan would agree to exchange the conserved water for State Water Project supplies to be delivered in Antelope Valley East Kern Water Agency, Semitropic Water Storage District, or Westlands Water District. When these proposals were not accepted, Verbena offered to sell its lands, totaling 12,819 gross acres (12,049 water toll acres), to Metropolitan. Metropolitan's cost to purchase this land was $255.6 million ($20,000 per acre).

2022 — Purchase of Cox Property

In 2022 Metropolitan purchased approximately 701 gross acres (665 water toll acres) of property from Cox Family Farms, subject to a leaseback whereby Cox would roll this land into the existing Cox lease with Metropolitan. Metropolitan's cost to purchase this land was $9.39M or $13,376 per acre.

Potential Future Land Acquisitions

While Metropolitan is not actively seeking to acquire further lands in the Palo Verde Valley, it will evaluate any future offers that arise. In a 2021 Board Informational Item, Staff presented considerations for purchasing additional lands with senior priority Colorado River water rights and the Board provided input.[1]

Table 6. Palo Verde Valley land purchases

Year	Seller	Acres	Water toll acres	Cost
2001	SDG&E	16,438	8,997	$41.4M
2015	Verbena	12,819	12,049	$255.6M
2022	Cox Family Farms	701	665	$9.4M
Total		29,958	21,711	$306.5M

[1] Water Planning and Stewardship Committee item 9-3, September 14, 2021

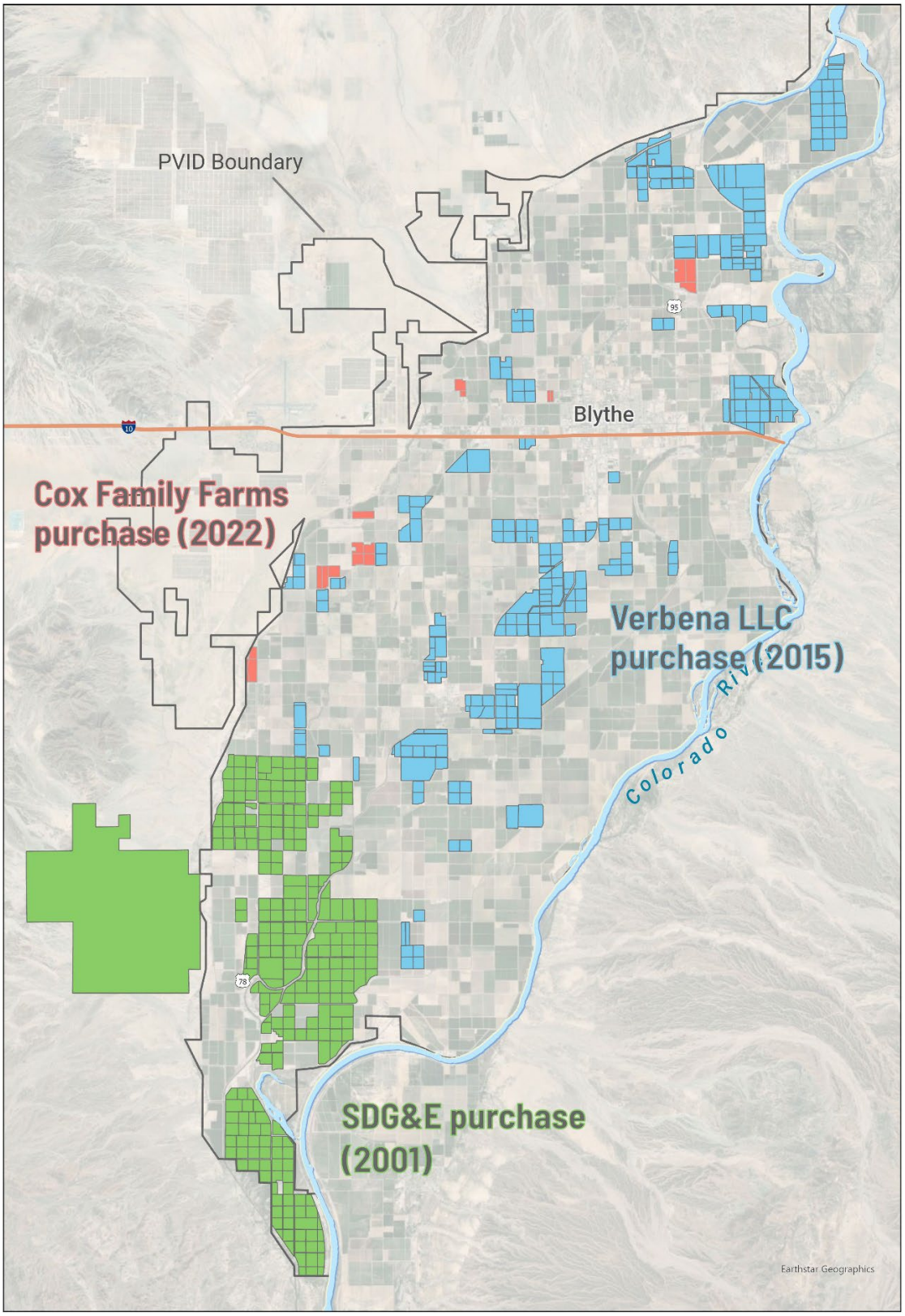


Figure 1. Map showing the three land purchases in the Palo Verde Valley

Linear sprinklers irrigate alfalfa on Metropolitan farmlands in PVID (photo by Metropolitan)

History of Agricultural Leases

Legacy Leases

When Metropolitan acquired the SDG&E lands in 2001, it inherited two active lease agreements with Tohshin Trading, Inc. and River Valley Ranches (RVR) that generated $905,000 in annual lease revenue. After their expiration, Metropolitan's Board authorized new leases with River Valley Ranches and HayDay Farms in 2005 and 2006, respectively, with terms shown in Table 7.

In July 2011, Metropolitan issued an RFP to solicit interest in leasing the 7,000 acres occupied by HayDay. After receiving three respondents, Metropolitan awarded a new five-year lease (January 2012 to December 2016) to HayDay at an annual rental rate of $250 per WTA.

Table 7. Original legacy lease terms (2006–16)

Lease	Term	Approximate gross acres	Water Toll Acres	Annual rent per water toll acre
HayDay Farms	Jan 2007 to Dec 2011	7,000 acres	6,685 WTA	$145 / WTA
River Valley Ranches	Jan 2006 to Dec 2016	2,280 acres	2,261 WTA	$140 / WTA

From 2001 to 2017, the leases were structured with a flat rental rate of $140–$250 per WTA. The leases included the same fallowing requirements as other landowner agreements in the Fallowing Program, except that Metropolitan would not make any fallowing payments to the lessees, but would reimburse their rent and water toll payments, as well as lessees overhead and maintenance costs.

Rent incentives for water conservation were included in the agriculture leases for the first time in 2017. These leases represented a new and innovative approach to use rent incentives as a method to foster agriculture practices that used less water, while still allowing lessees the flexibility to make market-driven cropping decisions.

2017 Leases

Upon purchasing 12,782 gross acres (12,049 WTA) from Verbena in 2015, Metropolitan assumed the existing lease with Wegis & Young (W&Y). The inherited lease had an expiration date in December 2016 and an annual rent of $240 per WTA.

Staff began exploring options in 2016 for the three leases (RVR, HayDay, W&Y) that had expiration dates in 2016. In April 2016, Metropolitan's Board directed staff to renew the RVR and HayDay leases (9,696 gross acres, 8,997 WTA), while conducting a competitive solicitation process for the acreage occupied by W&Y.

One of Metropolitan's priorities in managing its lands is to reduce *consumptive water use*, water consumed by crops or evaporated from fields – in other words, water actually depleted from the Colorado River. The 2017 leases included a new rent method that established consumptive water use targets for the lessees, with incentives and disincentives for water use under or over that target.

Consumptive Water Use Rent Method

Lessees would pay a base rent per acre for the irrigable farmland. At the end of the lease year, their consumptive water use was calculated as an average across all unfallowed acres, based on irrigation delivery data from PVID combined with a consumptive use factor. If their consumptive water use was over the target (4.0 acre-feet per acre per year), they would pay an additional surcharge of $187 per applied acre-foot over the target; if their water use was under the target, they would receive an incentive payment of $37.50 per acre-foot under. The target of 4.0 acre-feet per acre was selected because it is 20% below the typical alfalfa consumptive use. The rent incentive and disincentive payments escalated by 2% each year. Regardless of water use, the rent could not go below $100 per WTA or above $700 per WTA.

In September 2016, new ten-year leases were executed with RVR and HayDay which included the new consumptive water use rent method. 635 gross acres farmed by RVR were excluded from the new lease for use in the Lower Colorado River Multi-Species Conservation Program. To make up for this loss, a 654-acre tract of former Verbena lands was added to the lease, bringing RVR's total to 2,314 WTA. HayDay received two parcels of the former Verbena lands, bringing HayDay's total to 7,248 WTA.

Each lease included provisions allowing Metropolitan to call for fallowing of ~7 to 35 percent of the irrigable land, consistent with the Fallowing Program. The lessees are not entitled to Metropolitan's normal fallowing payments, but are reimbursed for rent, water toll payments, and maintenance costs. In certain circumstances, the leases allowed for extraordinary fallowing of up to 50% of irrigable acres, though this provision has never been triggered. HayDay was granted the option to seasonally fallow up to 1,100 additional water toll acres during June through September, subject to prorated rents and water tolls on these acres. The terms for the renewed HayDay and RVR leases are shown in Table 8 below.

Table 8. Renewed RVR and HayDay leases (2017)

2017 Renewed leases	Term	Gross Acres	Water toll acres	Annual rent per water toll acre
HayDay Farms 1	Jan 2017 to Dec 2026	7,942	7,248	$175*
River Valley Ranches	Jan 2017 to Dec 2026	2,456	2,314	$175*

* Annual rate per WTA goes up to $193 for years 2022–26.
Rent was based on a consumptive water use target of 4.0 acre-feet per acre per year.

Search for new Lessees for the Verbena Property

Metropolitan issued a Request for Statements of Interest (RFSI-TK-1136) in August 2016, seeking proposals to lease approximately 12,000 acres of the Verbena property. Six responses were received from five entities. Respondents were asked to indicate their preference for one or more predefined parcel groups, or to define their own preferred parcel group. All parcels of lands received interest from at least one respondent.

As a result of the RFSI process, Metropolitan entered into four new leases with Cox & Wegis, DeConinck Farms, HayDay Farms and Desert Milling. Different rental terms were negotiated with each of the four RFSI finalists. The negotiated leases included a term of five years for HayDay Farms and DeConinck Farms, ten years for Cox & Wegis, and five years for 65% of Desert Milling premises with twenty years for the remaining 35% of the premises, due to its proposal to cultivate permanent olive trees. All of the new leases included the new consumptive water use rent method described above, which included financial incentives and disincentives for going over or under the target (3.5 acre-feet per acre, per year). The terms for the new RFSI leases are shown in Table 9.

Table 9. 2017 RFSI leases

2017 Leases	Term	Gross Acres	Water toll acres	Annual rent per water toll acre
HayDay Farms 2	Jan 2017 to Dec 2021	5,430	5,058	$150
Cox & Wegis	Jan 2017 to Dec 2026	1,745	1,669	$150
DeConinck Farms	Jan 2017 to Dec 2021	585	564	$154
Desert Milling, Inc.	Jan 2017 to Dec 2021	3,842	3,615	10% of revenue, floor of $200/WTA

Lessees would pay base rent on an annual per acre basis for the water toll acres, plus an additional surcharge of $187 per applied acre-foot over the target, and a credit of $37.50 per consumptive acre-foot of use below the agreed threshold. The rent incentive and disincentive payments escalated by 2 percent each year. The rent minimum was minimum was $100 per WTA and the maximum was $700 per WTA.

2018 Lease Amendments

Crop Based, Tiered Rent Method

In July 2018, Metropolitan's Board authorized a change in the rent structure from the consumptive water use method to a crop-based method, due to the difficulty in measuring applied water with existing infrastructure and because of the uncertainty that the after-the-fact water calculation injected into lessees' planning. The crop-based method, emphasizing rent discounts based on crop choices, was intended to give lessees more certainty about their rent payments, since the rent would be determined based on crop plans submitted ahead of time. The method was meant to be a temporary measure, giving staff time to evaluate this new method. The change in rent method would sunset in December 2021 and revert to the consumptive water use method if it was deemed ineffective.

Under the new method, lessees submit an annual crop plan showing what they intend to plant, by month, on every leased field. Rather than directly measuring the water use, each crop is given an estimated consumptive water use which is then prorated based on the number of months it will be planted.

The estimated water uses for different crops come from Evapotranspiration of Applied Water (ETAW) data for Imperial County published by the California Department of Water Resources (Table 10). Any single crop, or any rotation of multiple crops on the same field, with an ETAW of more than 4.5 acre-feet per year is considered to be a "high-water-using crop" under this rent method. The number of acres of high-water-using crops are then tabulated to determine what percentage of the entire irrigable acreage is devoted to high-water-using crops.

The ETAW figures in Table 10 include nearly all of the common crops in PVID, with the highest-water using crop (alfalfa) having an ETAW of 5.2 acre-feet per year, followed by annual grasses (4.2), cotton (3.6), and various produce crops (1.7–2.9). The monthly water duties reflect different lengths of growing season for each crop. These ETAW values are published benchmarks, and actual measured ET may differ.

The rental rates are structured as three tiers based on the percentage of farmed acreage devoted to high-water using crops, as shown in

Table 11. The highest tier is intended to approximate a typical market rent.

Table 10. Crop water use values used for rent determination

Crop	Assumed Annual Water Use	Assumed Growing Season	Assumed Monthly Water Duty
Alfalfa	5.2 AF per year	12 months	0.43 AF per month
Klein Grass/Teff	4.2	12	0.35
Rye	4.2	12	0.35
Bermuda Grass	4.2	12	0.35
Citrus	3.85	12	0.33
Cotton	3.6	8	0.45
Orchard	3.85	12	0.33
Potato	2.9	5	0.58
Garlic	2.35	4.5	0.52
Onion	2.35	4.5	0.52
Onion Seed	2.35	4.5	0.52
Broccoli	2.35	4	0.59
Mixed Veg	2.35	4.5	0.52
Melons	2.2	4	0.55
Corn	1.9	4	0.48
Sudan	1.9	4	0.48
Wheat	1.7	6.5	0.26
Oats	1.7	6.5	0.26
Barley	1.7	6.5	0.26
Other	Values to be assigned with reference to crop equivalents or analogs as determined by Lessor in its sole discretion.		

Source: California Department of Water Resources—Statewide Agricultural Water Use Data, Imperial County; 10-year averages from 2000–10.

Table 11. Rental Rates by Water-Use Tier (2018 leases)

Percent of irrigable acres planted in high-water-using crops (≥4.5 AF / year)		Annual rent per water toll acre
Tier 3:	75% to 100%	$275 / WTA
Tier 2:	50% to 74%	$175
Tier 1:	0% to 49%	$120

2019 Northern Tract Leases

Desert Milling's lease was terminated in 2018 due to non-performance, and a land maintenance contract was put in place until the vacant acreage could be leased. In November 2018, staff began a competitive solicitation process for the land, resulting in the award of four new leases to DeConinck Farms (400 gross acres), Noroian Farms (759 acres), Quail Mesa Ranch (1,001 acres), and Red River Farms (1,656 acres), collectively known as the **Northern Tract Leases** (Table 12).

Field Specific-Crop Based, Tiered Rent Method

The four leases included the crop-based, tiered rent method but with a different calculation method for determining the tiers. Unlike the 2018 method, which determined the rental tier based on the percentage of high-water using crops for a lessee's entire acreage, the 2019 leases used a field specific method that determined a separate rent for each field based on cropping and assumed water use for various crops (Table 13).

Table 12. Tiered rentals for Northern Tract leases

North Tract leases	Term	Gross Acres	WTA	Rental Tiers 1/2/3
DeConinck Farms	Jul 2019 to Jun 2024	400	368	$200/$250/$300
Noroian Farms	Jul 2019 to Jun 2024	759	727	$200/$250/$300
Quail Mesa Ranch	Jul 2019 to Jun 2024	1,001	915	$200/$250/$300
Red River Farms	Jul 2019 to Jun 2024	1,656	1,594	$200/$250/$300

Table 13. Tiered rental payments by water toll acre

Rent Tier	ETAW/Year	Rate per water toll acre
Tier 3:	< 3.00 Acre Feet/Year	$200
Tier 2:	3.00 - 4.29 Acre Feet/Year	$250
Tier 1:	> 4.3 Acre Feet/Year	$300

Current Leases

River Valley Ranches elected to assign and transfer its leasehold of 2,456 acres (2,314 WTA) to HayDay Farms in August 2021, now referred to as the HayDay 3 lease.

In October 2021, Metropolitan's Board authorized five new leases with Coxco, DeConinck, and HayDay 1, 2 and 3 (Table 14). These leases have a maximum 18-year term and higher rental rates. The 18-year term was intended to coincide with the expiration of the Fallowing Program on July 31, 2040, providing Metropolitan with options for future management at that time.

Annual rent is based on the crop-based tiered rent method with four tiers (Table 15). The lessees and Metropolitan staff have found this rent method to be effective in incentivizing lower water-use crops while allowing lessees to respond to market conditions. The Tier 3 rents reflect fair market rent for each lease, as determined by an independent appraiser considering factors such as soil types, crop prices, other lease rates in the area, and fallowing requirements by Metropolitan.

The new leases include a new fourth rental tier (Tier 0) which reflects a deeply discounted rent of more than two-thirds of the current market rate, in exchange for planting no more than 34% of irrigable acres in high water-use crops. Annual rents escalate 2% per year. Given the leases' longer term, annual rents will be reappraised in 2027, 2032, and 2036, resulting in possible rent increases or decreases.

The third and last of Metropolitan's land purchases occurred in 2022, with the purchase of 702 acres from Coxco LLC (a current Metropolitan lessee). A leaseback agreement was included as a condition of the sale, and the acreage was added to Coxco's existing lease with the same terms.

In September 2023, Metropolitan's Board authorized three new leases with the Northern Tract lessees (DeConinck Farms, Noroian Farms and Red River Farms) which include higher rents and the same crop-based, tiered rent method as the Legacy Leases. Consistent with the Legacy Leases, the Northern Tract leases will expire on December 31, 2039. Rents escalate 2% each year and will be reappraised every five years.

In November 2023, Quail Mesa Ranch agreed to assign its leasehold of 915 WTA to Noroian Farms for the duration of the remaining term (through June 2024). After the new Noroian Farms lease became effective in January 2024, a lease amendment was executed in October 2024 to consolidate the Noroian Farms and Quail Mesa acreages.

Table 14. Current Metropolitan leases

	Max Term (including options)	**Gross Acres**	**WTA**
Legacy Leases			
HayDay Farms 1	July 2022 to Dec 2039	7,811	7,268
HayDay Farms 2	July 2022 to Dec 2039	5,442	5,079
HayDay Farms 3	July 2022 to Dec 2039	2,448	2,314
Coxco LLC	July 2022 to Dec 2039	2,462	2,334
DeConinck Farms	July 2022 to Dec 2039	583	564
North Tract Leases			
DeConinck Farms	Jan 2024 to Dec 2039	400	368
Noroian Farms	Jan 2024 to Dec 2039	1,760	1,642
Red River Farms	Jan 2024 to Dec 2039	1,656	1,594
Total		**22,562**	**21,163**

Table 15. Current lease rents

	Percent of acreage with high-water-using crops (≥4.5 AF / year)			
Lease	**Tier 0: 0–34%**	**Tier 1: 35–49%**	**Tier 2: 50–74%**	**Tier 3: 75–100%**
Coxco LLC	$125 / WTA	$142 / WTA	$207 / WTA	$325 / WTA
DeConinck Farms	$125	$142	$207	$325
HayDay Farms 1	$125	$142	$207	$325
HayDay Farms 2	$125	$142	$207	$325
HayDay Farms 3	$125	$131	$191	$300
Noroian Farms	$134	$164	$239	$375
Red River Farms	$125	$142	$207	$325
DeConinck Farms	$134	$153	$223	$350

All of the current leases allow for Metropolitan to collaborate with the lessees on water conservation studies and pilots, with compensation for their participation to be negotiated and paid out of the annual General District Requirements–Supply Programs budget for Palo Verde Land Management. In addition, the leases now include a rent incentive for participation in studies and pilots that focus on healthy soils and soil carbon accrual. These studies would be subject to Metropolitan's discretion and validation by a third-party, such as a university or grant-making agency. Lessees could obtain a temporary rent reduction of up to 30% for each acre selected for a project, for up to 500 acres and five years.

The current leases have been structured to be consistent with the management objectives presented in staff's informational report from September 14, 2021:

- Further the Board's written Colorado River policies.
- Reduce consumptive water use on the land by incentivizing less water-intensive crops or more efficient irrigation methods.
- Support a vibrant agricultural economy in the Palo Verde Valley by maintaining Metropolitan's lands as productive farmland and providing farmers flexibility to respond to market forces in their choice of crops and irrigation methods.
- Promote community acceptance and participation by creating a fair and transparent process for lease selection and soliciting input from the community.
- Advance state-of-the-art farming techniques by encouraging innovative irrigation methods, crop selection, and water use measurement technologies.
- Keep administrative overhead low by limiting the total number of leases.
- Provide a positive revenue stream for Metropolitan by generating rents which balance the value of the land and the unique lease conditions in place to achieve water supply objectives.

Financial Overview

In this section, we review the lease revenue trends over the past five fiscal years, including land acquisition and fallowing financial data. Revenue increased from $1.6M in FY 2019–20 to $4.3M in FY 2023–24 (Figure 2). It should be noted the FY 2019–20 figures reflect the initiation and ramp-up for the new Northern Tract leases. The implementation of the crop-based method was a key driver for the 92.3% increase in revenue for the Legacy Leases from FY 2019–20 to FY 2020–21. Refinement of the crop-based method is responsible for the 44% increase in revenue for the Legacy Leases from FY 2021–22 to FY 2022–23. A dip in revenue occurred in FY 2023–24 due to a change in market conditions, during which Metropolitan's lessees planted more lower-water-using crops.

Figure 2. Farm lease revenues on Metropolitan's Palo Verde Valley lands, 2019–24

Savings from fallowing Metropolitan lands at reduced cost

Metropolitan fallows its land at the same call percent as other landowners. However, Metropolitan can do so at much lower cost because it does not have to pay the per acre fallowing payments (Table 2) made to other landowners. The only cost to fallow on these lands is unrealized revenues from reimbursement of the rent and water tolls on the fallowed acreage. The net annual savings is $1.2M–$3.1M depending on the fallowing call. Had Metropolitan never purchased land in the Palo Verde Valley, it would have paid an additional ~$44.4M to landowners who would have owned the land. Table 16 shows these savings over a recent 5-year period.

Table 16. Metropolitan savings on fallowing payments due to land ownership, 2018 to 2023

Contract Year	Verbena Property	Cox Property	Reimbursement to Metropolitan tenants	Net Savings
2018/19	$1,403,275		($75,381)	$1,327,894
2019/20	$1,458,002		($288,654)	$1,169,348
2020/21	$1,495,904		($242,774)	$1,253,130
2021/22	$2,223,581		($161,529)	$2,062,052
2022/23	$3,018,439	$314,162	($232,853)	$3,099,748
Total	**$9,599,201**	**$314,162**	**($1,001,191)**	**$8,912,172**

One-time Revenues

- $9.7M from the Dennis Underwood Reserve conservation easement
- $0.31M from the Ten West powerline easement
- $29.1M from Lower Colorado System Conservation Program (2024–26)

Potential Future Revenue

- Renewable Energy Potential: $2.5M–$5M per year

Table 17. Participation in Lake Mead system water conservation

	Acres	2023–24	2024–25	2025–26
Metropolitan	7,750	$12.0 M	$12.1 M	$12.2 M
Tenant Reimbursement		$2.4 M	$2.4 M*	2.4 M*
Net Income		$9.6 M	$9.7 M*	$9.8 M*
*Projected				

Underwood Easement

In 2019 Metropolitan's board granted an easement to Reclamation to restore native cottonwood, willow, and honey mesquite trees on 635 acres of Metropolitan land in the southern Palo Verde Valley as part of the Lower Colorado River Multi-Species Conservation Program (MSCP). The MSCP provides regulatory approvals that facilitate Colorado River Aqueduct operations and Colorado River water transfers. Habitat restoration on this easement, known as the Dennis Underwood Reserve, helps fulfill California's acreage obligations under the program. Metropolitan received a one-time payment of $9.73M for the easements; future costs associated with the property, including water tolls, are the responsibility of Reclamation.

Renewable Energy Potential

Metropolitan recently entered into an option agreement with a subsidiary of AES Corporation (AES) for a long-term lease of up to 6,742 acres of Metropolitan's Palo Verde Mesa property to be used for carbon-free energy production and storage, contingent upon further project permits, approvals, and environmental clearances under CEQA. As consideration for the option, AES is paying an annual option fee of $100,000, which fee increases to $250,000 per year for years 6 through 9 of the option term, if applicable. If AES successfully obtains the permitting and approvals and exercises its option to lease, Metropolitan would receive an estimated revenue of $2.5M to $5M per year during the lease term and any extensions, depending on the size of the approved project.

Cropping and Water Use Benefits

Cropping on Metropolitan Lands

Because crop choice is both the main driver of consumptive water use in PVID and the means by which the lease rent is determined, Metropolitan closely tracks the cropping on its leased farmland, as well as larger cropping trends in the Valley.

Data on crops in PVID comes from two sources:

1. For Metropolitan-owned farmlands, monthly cropping for each field is reported in annual crop plans which the farm lessees submit for the purpose of rent determination.
2. Field-level crop data for the entire Palo Verde Valley is produced quarterly for Metropolitan by consultant LandIQ Inc. Crops are classified based on several public and commercial satellite imagery sources.

The crop mix on Metropolitan lands is broadly similar to the Palo Verde Valley as a whole (Figure 3). The most common crops in 2024 were forage crops (alfalfa and annual grasses), with smaller amounts of wheat, cotton, and potatoes. Crop diversity is somewhat low at present because the current 100% fallowing call limits the amount of acreage available for production. About 35% of Metropolitan's acreage is currently fallowed or economically idled (resting between crop rotations).

Alfalfa is the highest water-using crop in PVID, with an annual consumptive use of 5.0–5.5 AF/acre. Its high water use is partly due to the fact that it is a perennial crop that is grown for three to seven years, using water year-round. **Cotton** is the next highest water-using crop, with an annual consumptive use of 3.5–4.5 AF/acre. **Seasonal grasses** such as teff or wheat are grown for only a few months at a time and are often planted between alfalfa and cotton rotations. **Produce crops** such as potatoes, onions, and greens are highly seasonal, are typically sprinkler-irrigated, and have a very low water use, but they are less common in PVID compared to Yuma and Imperial Valleys.

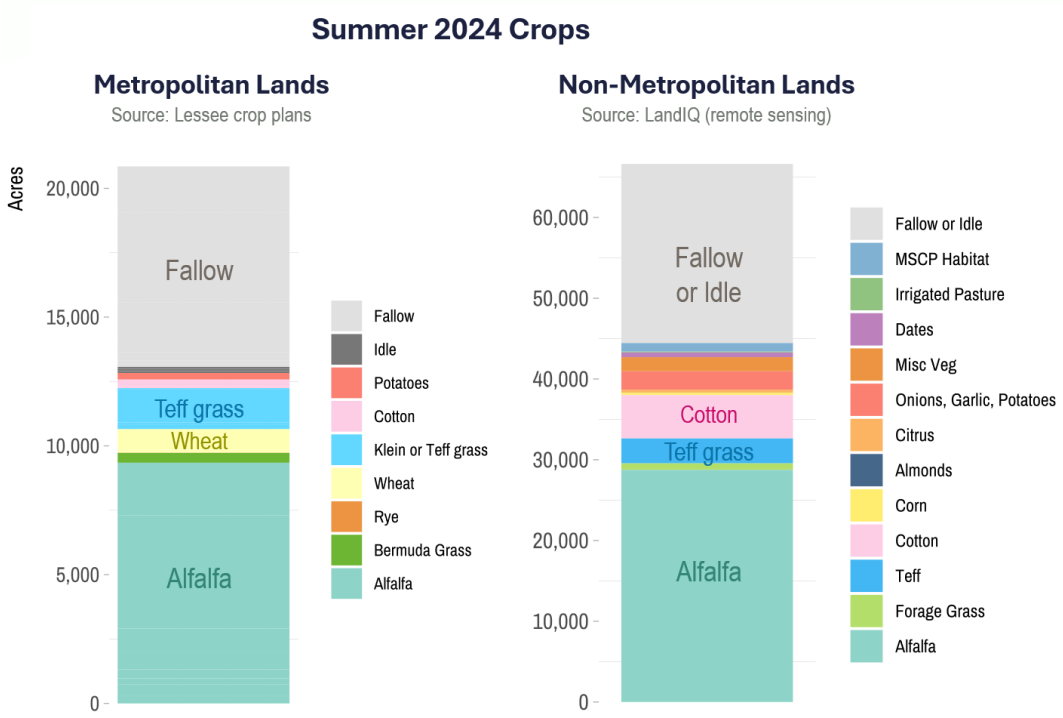


Figure 3. Cropping on Metropolitan vs. non-Metropolitan farmlands in PVID during summer 2024

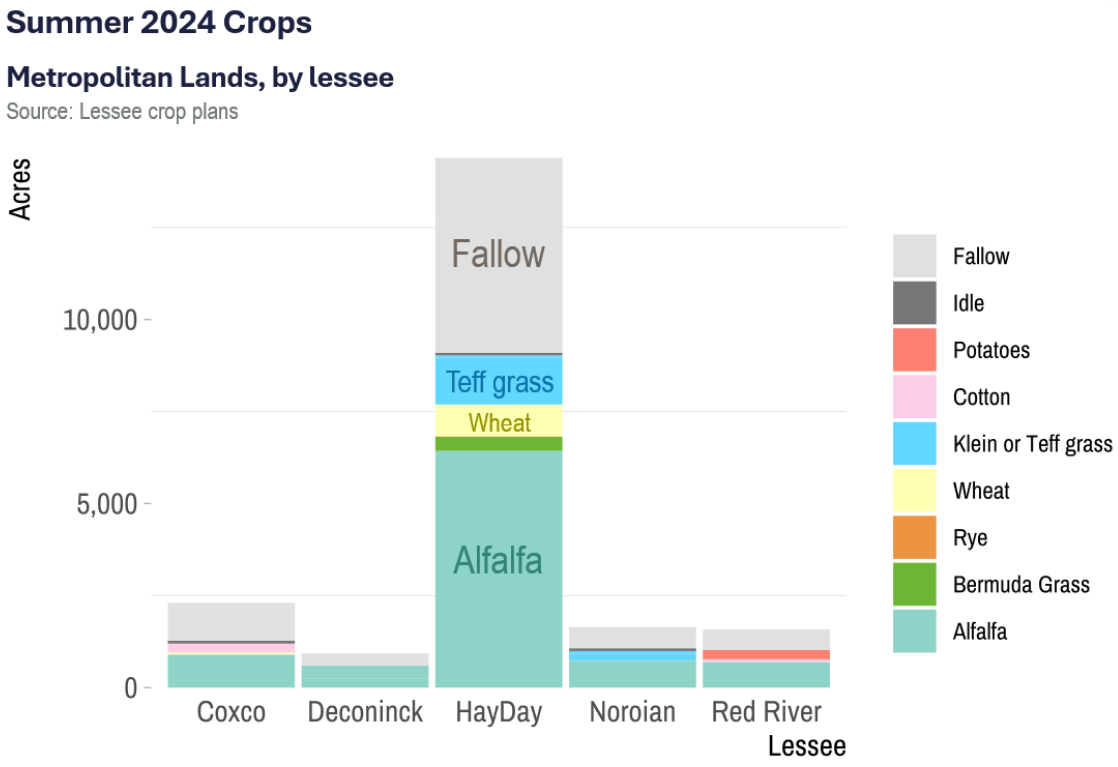


Figure 4. Cropping on Metropolitan farmlands during summer 2024, broken down by lessee (Some lessees hold multiple leases, whose crops are shown in aggregate here.)

Cropping behaviors that drive water savings

The main way that Metropolitan lessees have achieved water savings is by shifting some acreage on the margins from alfalfa and cotton to annual or seasonal grasses such as teff, bermuda, sudan, rye, and winter wheat. Because these crops are seasonal, they incorporate shoulder periods between harvest and planting when the fields are idled and little irrigation water is used. A second way that some lessees are saving water is by shortening their alfalfa rotations. By growing alfalfa on a shorter 2- or 3-year cycle, the idle downtime between rotations occurs more frequently.

Cropping by lessee

Because each Metropolitan lessee has a different business model, the mix of crops varies somewhat between lessees (Figure 4). All lessees maintain a base load of alfalfa to provide a stable revenue source. HayDay Farms, the largest lessee, produces premium-grade forage for the overseas markets, including annual grasses such as sudan, bermuda, and increasingly, teff. Noroian Farms has a long history of growing cotton in the Valley but has recently been experimenting with teff and onion seed. Red River Farms produces a small amount of potatoes, while DeConinck Farms has grown onions in the past.

The amount and type of produce crops vary considerably depending on market forces, but it is relatively small in most years. The lack of cold storage infrastructure, distance from the Mexican border, and competition with other produce-growing regions like the Yuma and Salinas Valleys has historically limited the amount of produce grown in PVID.

Cropping trends over time

In years when the fallowing call was lower (e.g. 2018–21), Palo Verde famers have planted a greater diversity of crops, and a larger acreage of produce crops (Figure 5). The most common produce crops on Metropolitan lands have been root vegetables such as onions and potatoes, with smaller amounts of leafy greens. River Valley Ranches, a former legacy lessee that grew organic produce, exited the Valley in 2019 and HayDay Farms took over the fields. Since 2022, teff grass has become more common throughout the Valley as a seasonal crop grown in rotation with alfalfa and cotton.

Potential new low-water-using crops that have been proposed in PVID include hesperaloe (a succulent grown for fiber pulp), guayule (a rubber crop), and olives. These crops would require a large up-front investment to install subsurface drip irrigation. Further, permanent tree crops such as olives are not common in Palo Verde Valley and could reduce the flexibility for a future fallowing program.

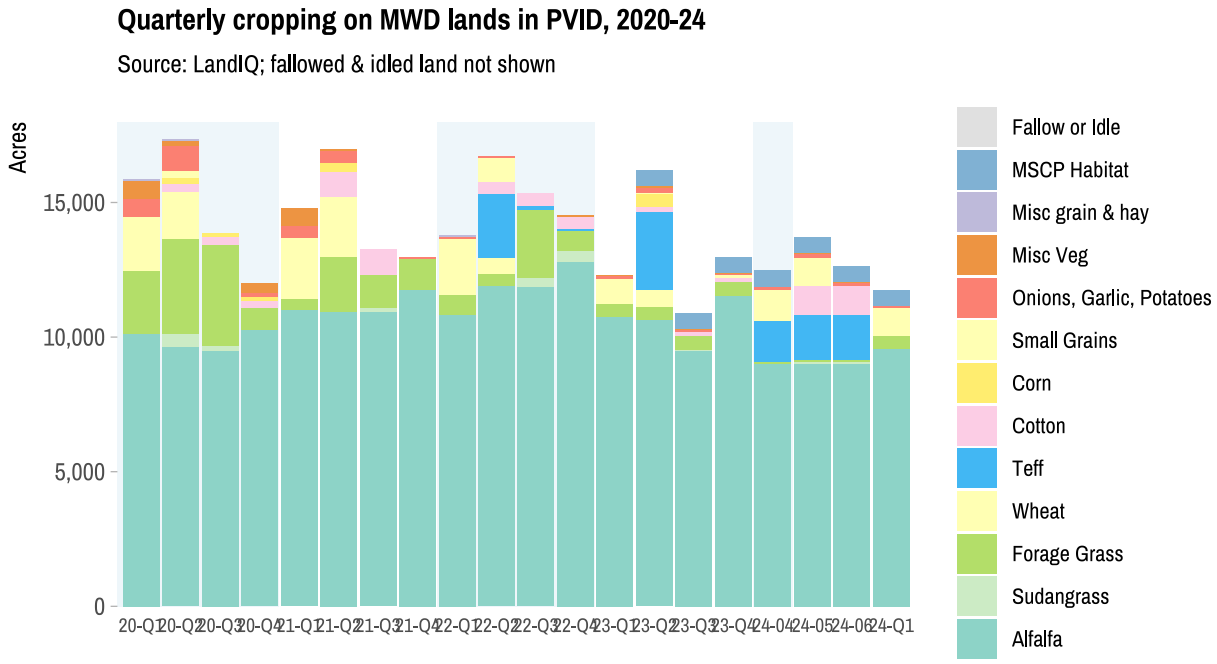


Figure 5. Cropping on Metropolitan farmlands in PVID from 2020–24

An alfalfa field being flood irrigated in PVID (photo by Metropolitan)

Water Use on Metropolitan Lands

After the first round of leases with water conservation provisions were signed in 2017, Metropolitan sought ways to improve the measurement of on-farm water use on its PVID lands. Flood-furrow irrigation is the most common type of irrigation in PVID, which presents two challenges from a water measurement standpoint. One is that this type of infrastructure is difficult and expensive to reliably meter. The second is that only a portion of the water applied onto a field is consumptively used by the crop and lost from the river system.

We distinguish two types of water use:

1. **Applied water use** is irrigation water that is delivered onto the field through the canal and ditch infrastructure (Figure 6). In flood irrigation, only a portion of this water (~50-70%) is actually consumed by the crop; the unused portion may evaporate from the surface of the field, run off the surface of the field, or seep deep into the soil column. In PVID, most of this runoff and percolated water is captured by a network of agricultural drains and returned to the Colorado River, where it is measured before being discharged. The water that is returned back to the river acts as a credit that offsets PVID's diversions in the river accounting.

2. **Consumptive water use** is the water actually consumed by the crop or evaporated from the surface of the field, also known as evapotranspiration (ET). This is the water that does not return to the river and is 'lost' from the system from an accounting perspective. The main driver of consumptive use is the choice of crop: crops like alfalfa have a high annual consumptive use, while seasonal produce crops have a lower consumptive use.

Because on-farm consumptive use reflects only the water that is actually lost from the river system, it is a better proxy for PVID's total Colorado River use, which in turn affects Metropolitan's Agricultural Adjustment. Therefore, we believe consumptive use is the most useful metric for evaluating and comparing farm water use in PVID.

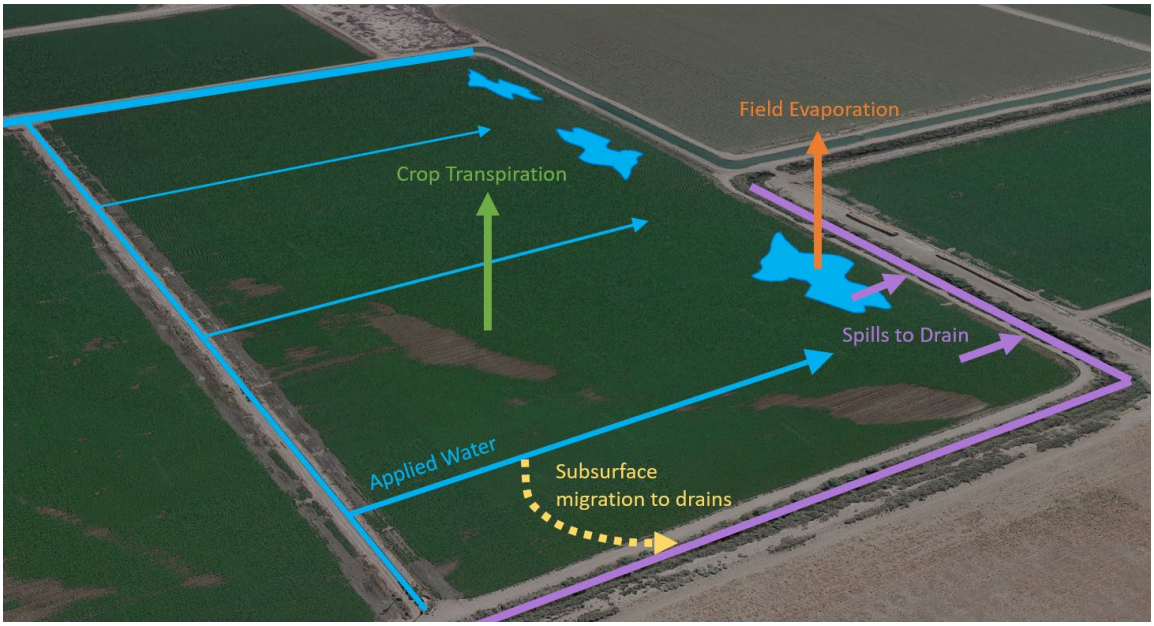


Figure 6. Conceptual model of the farm field water balance showing different types of water use. Shown are Applied Water, flows of unused tailwater to drains, and Consumptive Water Use (Crop Transpiration + Field Evaporation).

Measurement of applied water

Estimating water savings on Metropolitan's lands is confounded by the challenges of measuring agricultural water use at the field level. The open-channel, gravity flow ditches common in PVID are inherently harder to meter than the groundwater pumps and pressurized pipes found in many other agricultural regions. Moreover, because PVID does not charge for water on a volumetric basis, there is little incentive to develop a precise measurement system for irrigation deliveries.

Nevertheless, PVID does attempt to estimate the volume of each irrigation delivery. PVID's zanjeros (ditch-riders) measure the water flow rate by hand at the field headgate approximately every six hours during an irrigation event. This data is aggregated and collected in PVID's water order database, from which the deliveries for each Metropolitan headgate are reported monthly. However, the measurement is an imprecise process and there are many sources of error baked into the applied water data. In 2017-19, Metropolitan contracted with an independent consultant to study the accuracy of the irrigation data using flow sensors deployed in 15 farm ditches (Figure 7). The study indicated that PVID's water delivery data was often too high, by an amount that varied by headgate but was sometimes as high as 25%. When aggregated over many headgates and many deliveries, however, the irrigation delivery data does give a useful picture of applied water trends.

Figure 7. A flume used to measure irrigation flows on Metropolitan farmland in 2017. *(photo by Metropolitan)*

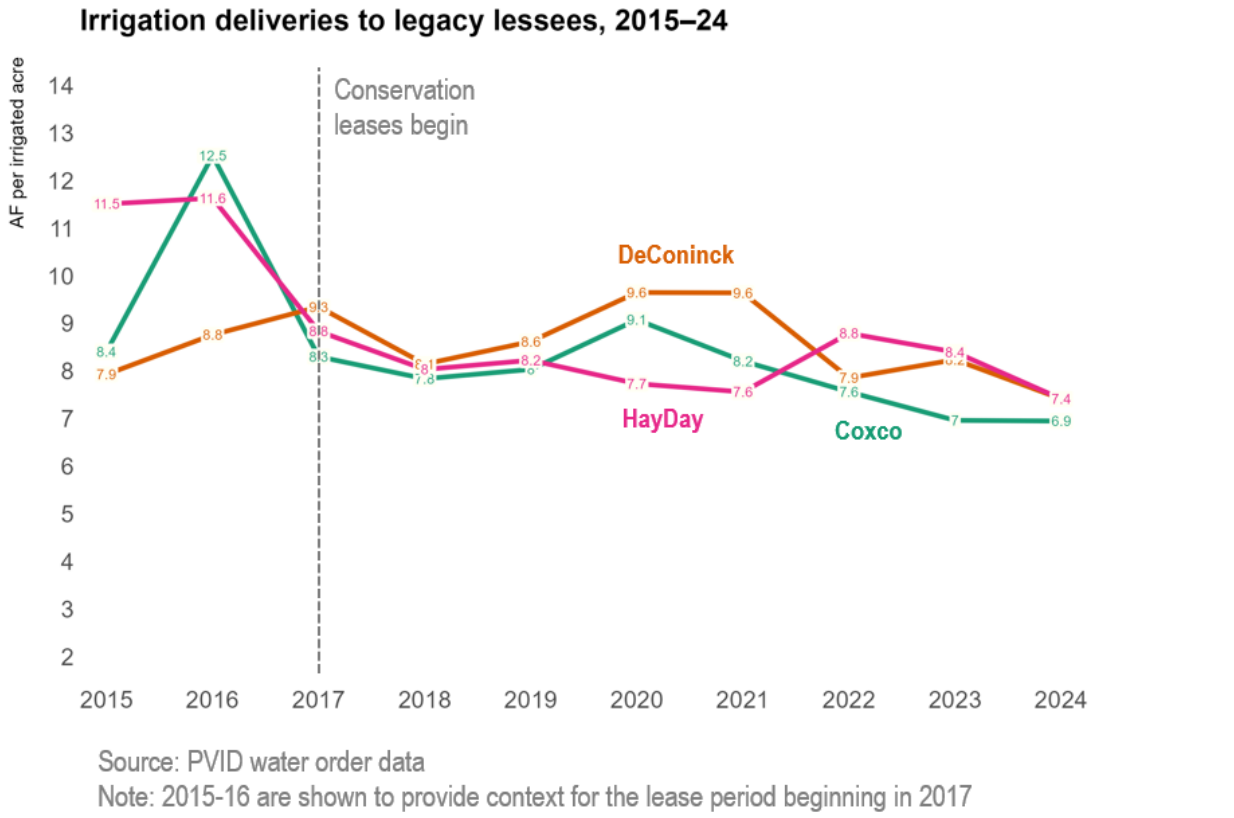
Applied water trends

Metropolitan first executed leases with water conservation provisions in early 2017. We have two years of data prior to these new leases (2015–16) which serve as a baseline for comparing subsequent water use (keeping in mind that much of the land now owned by Metropolitan was then managed by different farm entities than the current lessees). Irrigation deliveries on the parcels that would become part of the legacy leases varied between 7.9 and 12.5 AF/acre/year (Figure 8, top).

In 2017, the year in which the first generation of water conservation provisions took effect, water use across most legacy leases dropped to 8.3–9.3 AF/acre. We interpret much of this drop as a vigilance on the part of the lessees to self-monitor their water use in light of the new leases. Applied water use has since remained stable between 7–9 AF/acre, with a slight downward trend in recent years due to improved irrigation efficiency.

Irrigation deliveries to the North Ranch lessees (Figure 8, bottom) was initially quite low due to the start of their leases in the middle of 2019 and the ramp-up of their farm operations on the new ground. Differences in business models and cropping are reflected in the widespread applied water in 2020–22. Since 2023 however, water use has fallen to 7–8 AF/acre/year.

As lessees have gained longer lease terms, they have voluntarily invested in lining ditches, levelling fields, replacing gates, and making other improvements which increase irrigation efficiency. While these actions have substantially reduced the applied water on Metropolitan lands, not all of it translates to reductions in *consumptive* use.



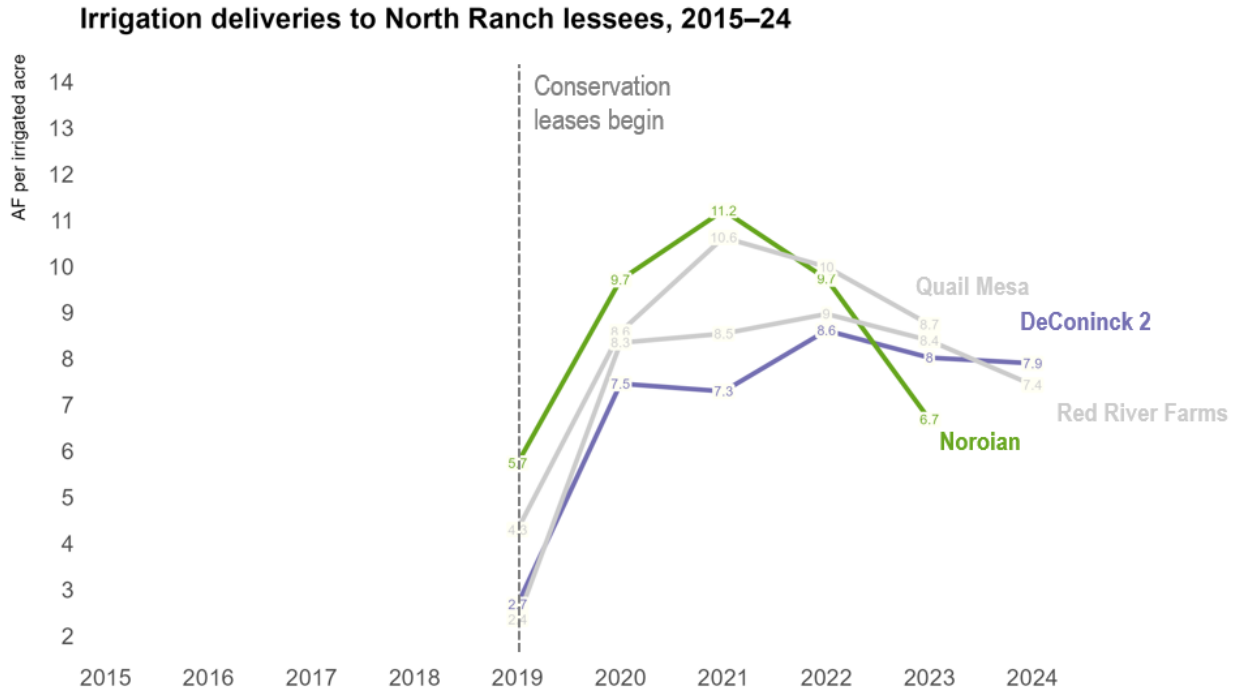


Figure 8. Irrigation deliveries (applied water), in AF per acre, to Metropolitan lessees for 2015–2023. Only irrigated acres are included, to control for the changing fallowing call. Data from PVID water orders.

Measurement of consumptive use (ET)

Over the last 15 years, remote sensing methods for measuring ET over large spatial areas have become commonplace. Metropolitan was an early adopter of this technology, hiring Dr. Rick Allen, the developer of the widely used METRIC model, to produce ET estimates for PVID in 2014. Thanks to the OpenET service, field-level estimates of ET from six common remote-sensing models are now available to the public for the entire western U.S.

Such models have their own sources of uncertainty: cloudy days, limited satellite overpass dates, random error, and systematic bias. However, the environment of Palo Verde Valley – irrigated forage crops in an arid desert climate – presents near-ideal conditions for achieving the best performance with these models. After evaluating the performance of several different models, Metropolitan staff determined that the version of the METRIC model available on the OpenET platform ("eeMETRIC") produced sufficiently accurate results, with ET totals for PVID that agree well with USBR's accounting data. The OpenET data has the advantage of providing monthly water use estimates for every individual Metropolitan field, independent of any on-the-ground measurement of irrigation water.

Consumptive water use (ET) trends

Using data from OpenET, consumptive use estimates in AF/acre were generated for Metropolitan and non-Metropolitan lands in PVID for the years 2020–23 (Table 18). Consumptive use on Metropolitan lands is about 5.0 to 5.3 AF/acre/year, consistent with a crop mix dominated by alfalfa and annual grasses.

Table 18. Annual consumptive use estimates for Metropolitan vs. non-Metropolitan fields in PVID

	Annual ET		
Year	**Metropolitan parcels**	**Other PVID parcels**	**Water savings from lease structure**
2020	5.12 AF per acre	5.22 AF per acre	0.10 AF per acre
2021	5.01	5.26	0.25 AF
2022	5.31	5.40	0.09 AF
2023	5.21	5.35	0.14 AF

Source: OpenET eeMETRIC model.
Only irrigated (non-fallowed) fields are included in the analysis.

Total ET across all of Metropolitan's Palo Verde lands is approximately 80–85,000 AF per year. A steady increase in ET has been observed since 2017, even as Total Deliveries have remained flat. This may be a by-product of lessee investments in improving the efficiency of their irrigation systems; as longer-term leases were executed, many lessees lined earthen ditches, replaced headgates and turnouts, rerouted ditches, and re-levelled fields. However, many of these improvements have resulted in more optimal irrigation and alfalfa yields, which may explain the higher ET.

Potential New Conservation Activities

Beyond the water savings from rent-based incentives, additional water savings are possible through potential new programs. Such programs could involve:

- Piloting new types of water-efficient crops, such as guayule or agave
- Deficit irrigation programs, similar to the one that IID rolled out in 2024. Such a program would involve skipping alfalfa irrigations for 45 to 60 days during the high-demand summer months.
- Investment in irrigation efficiency, through technologies such as high-efficiency surface irrigation or gravity drip irrigation. Several companies have developed efficient irrigation technologies that work well with the open canal gravity flow infrastructure in PVID. However, these technologies tend to be expensive, require grower training and periodic maintenance, and have uncertain consumptive water savings (irrigation efficiency mainly reduces applied water use).

Any such programs would require cooperation with Metropolitan's lessees, who would need to incorporate these practices into their existing business operations.

Multispecies cover crops are part of a regenerative agriculture study led by Cal State University Chico, in coordination with Metropolitan and Metropolitan's lessee HayDay Farms (photo by Metropolitan).

Innovative Farming Practices

Beyond the quantifiable benefits of revenue and water, owning farmland in PVID allows Metropolitan to participate in studies related to agricultural water use and soil health, as well as pilots of new agricultural technologies. Such programs allow Metropolitan to partner with university researchers, ag tech firms, and farmers to demonstrate innovative practices that may have benefits across the Lower Colorado River Basin.

Chico State Regenerative Agriculture Studies

Since 2022, Metropolitan has partnered with researchers from California State University, Chico to study the benefits of regenerative agricultural practices on soil health. The team are studying whether three regenerative practices – seasonal cover crops, no-till planting, and armoring soil with crop residue – can improve the fertility, microbial and fungal communities, and carbon accrual in the degraded soils common in the Palo Verde Valley.

In the first study, directly funded by Metropolitan since 2020, the researchers are studying the benefits of seasonal cover crops as an alternative to bare fallowing in between crop

rotations. They will determine whether and how quickly the cover crops improve the soil fertility across a range of metrics such as bulk density, nutrient availability, and subsequent cash crop yields; they will also determine the water requirements of the cover crops. The results will be compared to adjacent bare fallow control fields.

In the second study, the researchers are focused on the soil carbon benefits of a suite of several regenerative practices over five years. Agriculture is California's fourth-largest emitting sector, comprising 8% of the state's greenhouse gas emissions. While at least 70% of that is attributed to livestock, croplands, and associated fertilizer and manure applications, soil management practices and farming equipment and operations make up the remainder.

The goal of the second study is to investigate the potential to reverse these emissions via agricultural practices. Through soil samples and direct measurement instruments on the ground, the Chico State team will measure the flux of carbon between the atmosphere and the shallow soil to quantify the potential for soil carbon accrual. A secondary goal is to determine how quickly the microbial and fungal communities within the soils, which are key indicators of soil health, can be restored. Metropolitan is providing an irrigation flow meter for this project, while Metropolitan's lessee HayDay farms is managing the field sites for both studies.

While there is much research on regenerative agriculture and soil health these days, these projects are unique and innovative in several regards:

- Direct measurement of carbon fluxes through eddy flux towers
- Research on arid, degraded soils common to the desert southwest, where regenerative practices have not been well studied
- Research on the benefits of a suite of regenerative practices in combination, as opposed to a single practice like cover crops alone

Other Indirect Actions

PVID Voting Rights

PVID is governed by a seven-member Board of Trustees. Landowners have voting rights based on ownership of irrigated acreage. Metropolitan receives one vote for each gross acre, giving Metropolitan a voice in water management through the election of Trustees (in the September 2024 election, Metropolitan cast 29,878 votes, as determined by PVID). During elections, Metropolitan conducts interviews with those running for open seats.

Participation in the Lower Colorado River Multi-Species Conservation Program

The Lower Colorado River Multi-Species Conservation Program (LCRMSCP) provides habitat for listed endangered species in the Lower Basin. Established in 2005, the LCRMSCP provides Endangered Species Act compliance for the operation of the river below Hoover Dam. Under the program, each Lower Basin state is required to identify a certain acreage of riparian lands for habitat restoration.

In 2016, the Bureau of Reclamation identified 635 acres of Metropolitan's land in southern PVID as being suitable for habitat restoration under the LCRMSCP. Metropolitan granted the Bureau of Reclamation a conservation easement on those acres in perpetuity in 2019, creating the Dennis Underwood Conservation Area. Today, the Underwood reserve has been transformed into native cottonwood, willow, and honey-mesquite groves that provide habitat for species such as the yellow-billed cuckoo and Arizona Bell's vireo. The addition of Metropolitan's lands to the program has helped to fulfill California's acreage commitment. Metropolitan is the largest non-federal contributor to the program.

Water begins to irrigate a newly planted cottonwood sapling on the Dennis Underwood Conservation Area, an area of former farmland that is now managed as habitat for endangered species. (photo by Metropolitan)

Strategic Considerations

Exclusion of high-water-using and speculative interests on Metropolitan lands

Over the past decade there has been increasing interest in high-priority Colorado River farmland from hedge funds, private capital, and overseas businesses. Many of these interests are incentivized to maximize farm production, preferring to optimize high-water-using crop acreage and yields rather than participating in the Fallowing Program. Others may seek to completely fallow their lands and exchange the water with other users, as we have recently seen in Cibola, Arizona. By owning a substantial amount of land and managing it as active farmland with incentives for water conservation, Metropolitan is able to mitigate the risk of both water-maximizing landowners and buy-and-dry landowners.

Emergency water supply reliability

In the event of a shortage in the Lower Colorado Basin that results in a large cutback to Metropolitan's Colorado River supplies, Metropolitan reserves the option to fallow additional acreage on its land as an emergency measure. This could be accomplished through agreements with tenants, or as a last resort, termination of leases with proper notice.

Post-2026 water supply reliability

There is currently great uncertainty regarding the post-2026 regulatory landscape on the Colorado River. Owning land in the Palo Verde Valley may help Metropolitan and other Colorado River contractors in the state of California meet any future commitments and may provide flexibility in developing future water supply programs.

Supporting the Local Community

Metropolitan supports the Palo Verde Valley economy by paying farmers to fallow land while gaining additional Colorado River Supplies for Metropolitan's service area. Payments to landowners provide stable income that can be used on farm-related investments, purchases and debt repayment. However, fallowing can also create third-party impacts the valley-wide community. To address this, in 2006 Metropolitan established a $6 million Community Improvement Fund (CIF) that is managed and administered by local citizens to support community improvement programs, small business development, and workforce

training in the Palo Verde Valley. The CIF board is comprised of nine community members from the Palo Verde Valley and two directors at large, each selected by the Metropolitan Water District of Southern California and Palo Verde Irrigation District.

The Community Improvement Fund to date has supported:

- Creation of 134 jobs and retention of 127 jobs, according to a 2014 economic study
- 47 public benefit grants totaling $1.8 million, as of Dec 2024
- Grants given to local non-profit organizations, including the City of Blythe Recreation Center, Regional Training Center, Police Activities League, Palo Verde College Truck Driving School, Appleby School PTO, Colorado River Fair, Junior Women's Club, Palo Verde Library, and Palo Verde Historical Museum, and Joe Wine Blythe Recreation Center.
- 40 small business loans totaling over $10.1M as of Dec 2024, including the Dobbs/Ashley Furniture Store & Distribution Center, A&R Bakery, Subway, Hampton Inn and Suites, and Palo Verde Hospital.

In addition to the CIF, in February 2025, Metropolitan's Board approved entering into an agreement with PVID to establish a separate Community Enhancement Collaborative that will support business development, public health, schools, public safety and other projects that benefit the community within PVID's service area. The new program is being jointly administered by Metropolitan and PVID with approximately $8M to be provided by the federal government pursuant to the Inflation Reduction Act. The agencies will work together to solicit funding proposals from the community, evaluate them, and select recipients.

References

The current leases have been structured to be consistent with the following Board policies and principles:

- By Minute Item 42820, dated February 10, 1998, the Board approved the policy principle on Colorado River Resources Strategy supporting Metropolitan's interests and increasing its dependable entitlements to Colorado River water, while collaborating with other California Colorado River agencies.
- By Minute Item 44542, dated July 10, 2001, the Board approved Principles of Agreement for a Land Management, Crop Rotation, and Water Supply Program with Palo Verde Irrigation District.
- By Minute Item 45053, dated October 22, 2002, the Board authorized entering into agreements for the Palo Verde Irrigation District Land Management, Crop Rotation, and Water Supply Program and community improvement programs.
- By Minute Item 45517, dated September 23, 2003, the Board approved the Quantification Settlement Agreement (QSA) and related agreements among Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority, and Metropolitan. Under the QSA, Metropolitan could acquire Colorado River water from PVID during the Quantification period without objection by IID and/or CVWD.
- By Minute Item 48766, dated August 16, 2011, the Board adopted the proposed policy principles for managing Metropolitan's real property assets.

One Water and Adaptation Committee

Benefits of Metropolitan's Land Ownership in the Palo Verde Valley

Item 6b

March 10, 2025

Overview of Report

Subject

Benefits of Metropolitan's land ownership in the Palo Verde Valley

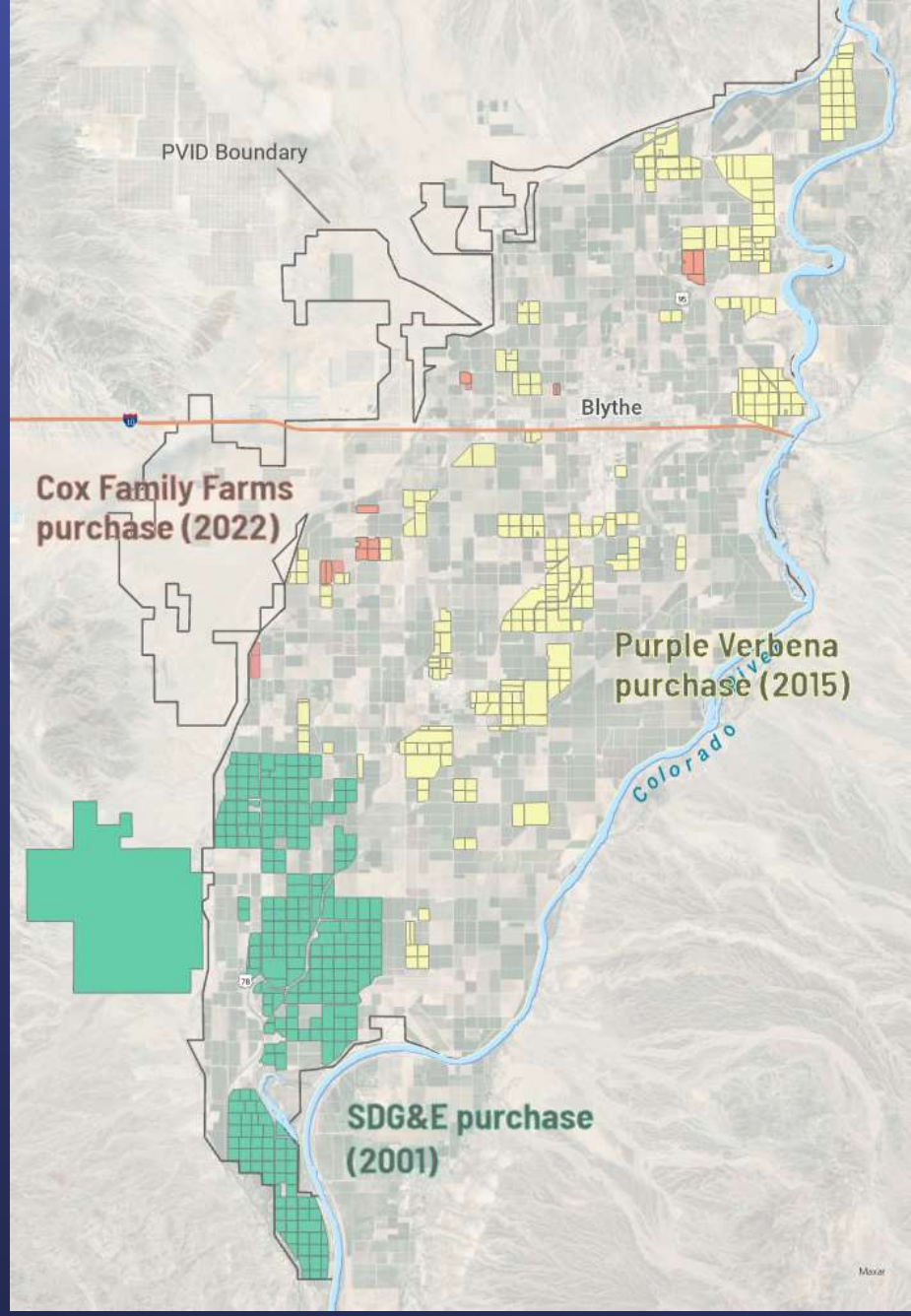
Purpose

To assess the financial, water conservation, and other benefits associated with Metropolitan's land ownership in the Palo Verde Valley

Service Area & CRA

Acquisition history

2001	SDG&E	$ 41M	16,438 acres
2015	Verbena	$ 256M	12,819 acres
2022	Cox Family Farms	$ 9M	701 acres
		$ 306M	**29,958** acres **21,711** irrigable



Benefits of Land Ownership in PVID

1. **Lease and other revenues**
2. **Fallowing at reduced cost**
3. **Water savings from lease structure**
4. **Reclamation use of the Fallowing Program for system water conservation**
5. **Indirect benefits:**
   - PVID voting rights
   - Regenerative farming and soil health studies
   - Multi-Species Conservation Program participation
   - Community partnership
   - Long-term supply reliability

Benefits of Land Ownership in PVID

1. Lease and other revenues

Farm leases	**$1.6–$4.8M** per year, depending on lessee cropping & fallowing call
Underwood Reserve easement to USBR	**$9.7M** (one-time)
Ten West powerline easement	**$0.31M** (one-time)
Bureau of Reclamation system conservation payments	**$36M** (one-time)
Potential revenue from renewables (solar leases)	**$2.5–$5M per year**

Benefits of Land Ownership in PVID

2. Fallowing at reduced cost

Metropolitan fallows its own land at the same call percent as other landowners.

However, Metropolitan can do so at much lower cost because it does not have to pay the landowner fee ($1,003 per acre in 2023–24) on its own land.

Annual savings of **$1.2 – $3.1M** (depending on fallowing call)

If Metropolitan had not purchased land in PVID, it would have paid an additional ~**$44.4M** to the owners of the land.

Benefits of Land Ownership in PVID

3. Water savings from lease structure

The current lease structure promotes water conservation through tiered rent incentives for lower-water-using crops.

Lessees still have freedom to choose which crops to grow.

Metropolitan lessees use **~0.10 – 0.25 AF per acre** less water than other PVID farmers, on average.

Across all Metropolitan acreage not subject to fallowing, this resulted in **~1,400 – 4,940 AF** of water savings in 2024.

Benefits of Land Ownership in PVID

4. Reclamation use of the Fallowing Program for system water conservation

During 2023–26, Reclamation is funding the Fallowing Program for system water conservation in Lake Mead, under Bucket 1 of the Inflation Reduction Act.

As a landowner, Metropolitan receives an additional **$9.6 – $9.8M per year** from the Federal government for fallowing on its lands.

Benefits of Land Ownership in PVID

5. Indirect Benefits

PVID Voting Rights

Metropolitan receives 1 vote for each gross acre (29,878 total votes).

Regenerative farming and soil health studies

Owning land provides the opportunity to partner with researchers to study the benefits of alternative farming and irrigation practices, as Metropolitan is doing with Chico State University.

Multi-Species Conservation Program Participation

The 635-acre Dennis Underwood Conservation Area in southern PVID provides ESA compliance for operation of the Lower Colorado River.

Benefits of Land Ownership in PVID

5. Indirect Benefits (cont'd)

Community partnership with the Palo Verde Valley

Community Investment Fund (2005)

Community Enhancement Collaborative (2025)

Post-2040 supply reliability

When the existing Fallowing Program expires in 2040, owning land will give Metropolitan flexibility in developing subsequent water supply programs.


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

Bay-Delta Resources

- **Bay-Delta Management Report**

Summary

This report provides a summary of activities related to the Bay-Delta for February 2025

Purpose

Informational

Detailed Report

Long-Term Delta Actions

Delta Conveyance Project

On February 14, the California Department of Fish and Wildlife (CDFW) issued an Incidental Take Permit (ITP) under Section 2081 of the California Endangered Species Act (CESA) for the Delta Conveyance Project. Completion of this permit is an important milestone in the planning process, advancing this critical project towards the implementation phase.

Under CESA, the California Department of Water Resources must obtain an ITP to avoid jeopardy, minimize incidental take, and fully mitigate any impacts of authorized take on threatened or endangered species caused by the construction, operation, and maintenance of the Delta Conveyance Project.

Near-Term Delta Actions

Delta Islands

On February 10, staff released a Request for Proposals (RFP) to engage a partner to cultivate rice on a minimum of 1,000 and up to 1,360 acres on Webb Tract with an initial base term of 10 years and an option to extend for an additional 5 years. Interested respondents are encouraged to make a recommended site visit on February 26. Staff is making a concerted effort to widely distribute information on the RFP. Notification of the RFP was sent to over 150 parties who have signed up for notifications about the Webb Tract projects. In addition, staff is reaching out by phone to local rice growers, Farmers Rice Cooperatives, local farm bureaus, and Cooperative Extension Rice Advisors in the area to ensure that interested farmers are notified of the release of the RFP. Yolo, Solano, and Sacramento Farm Bureaus posted information about the RFP in their newsletters.

On February 12, in partnership with the Sacramento-San Joaquin Delta Conservancy, a hybrid public meeting was held to update interested parties on the progress of the Webb Tract Wetland Restoration and Webb Tract Rice Development Projects. The meeting was attended by 17 in-person participants at the Big Break Visitor Center and 25 participants on Zoom.

Bay-Delta staff is currently reviewing a Statutory Exemption for Restoration Projects (SERP) application for the Webb Tract Wetland Restoration Project. If approved by CDFW, the SERP exemption will provide a streamlined California Environmental Quality Act clearance for the project and will pave the way for expedited permitting through the new Restoration Management Permit Act enacted on January 1, 2025. The Act is intended to accelerate beneficial restoration projects in California. The SERP exemption application is scheduled for submission in early March 2025.

Date of Report: March 10, 2025

Colorado River Resources

- **Colorado River Management Report**

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for February 2025

Purpose

Informational

Detailed Report

Metropolitan Signs Municipal Agency Letter Supporting Reclamation Staff

On February 27, Southern Nevada Water Authority, Central Arizona Project, and Metropolitan sent a letter to Secretary of the Interior Doug Burgum, expressing support for the Bureau of Reclamation staff and encouraging maintaining sufficient staffing to effectively manage the Colorado River System. Similar letters were sent from the Colorado River Board of California and other agencies throughout the Colorado River Basin. The letters expressed the importance of the Colorado River to the southwestern United States.

Lower Basin States Letter to Secretary of Interior

On February 13, Arizona, California, and Nevada (the Lower Basin States) sent a letter to Secretary of the Interior Doug Burgum, congratulating him on his confirmation and raising concerns about the Bureau of Reclamation's (Reclamation's) process for developing post-2026 operational guidelines for the Colorado River system reservoirs under the previous administration. The letter reaffirmed the Lower Basin States' commitment to a collaborative, consensus-driven approach in developing new operational guidelines and emphasized the advantages of consensus over imposed solutions or litigation. The states urged Secretary Burgum to direct Reclamation to retract the Alternatives Report and ensure a legally compliant analysis of the alternatives. They also expressed optimism about renewed collaboration under his leadership.

Key Messages Outlined in the Letter

1. Concerns Regarding the "Alternatives Report"

- The January 2025 Alternatives Report, issued by the previous administration, falls outside the standard National Environmental Policy Act (NEPA) process.
- The Lower Basin States' proposed alternative is not included among those selected for full analysis.
- The report did not incorporate compliance with the 1922 Colorado River Compact in its evaluation of any of the alternatives.
- Several issues with the NEPA process to date require resolution.

2. Glen Canyon Dam Infrastructure Protection

- Reclamation assumes that maintaining Lake Powell above the minimum powerpool elevation of 3,490 feet is the only means of protecting dam infrastructure. The letter raises concerns that the prior

administration's approach—reducing releases to the Lower Basin to protect Lake Powell's outlet works—fails to address necessary infrastructure repairs.

- Engineering solutions, releases from federal reservoirs above Lake Powell, and temporary Upper Basin water use reductions would be more effective measures for protecting Glen Canyon Dam infrastructure.
- Reclamation should conduct a full NEPA analysis of alternative solutions, including engineering upgrades to Glen Canyon Dam's river outlet works, rather than relying solely on reduced water releases to the Lower Basin.

3. Proposed Reductions

- The Lower Basin States have demonstrated their commitment to a consensus-based solution by voluntarily agreeing to conserve 1.5 million acre-feet of water per year under most system conditions.
- When system storage falls below critical thresholds, the Lower Basin States believe that Basin-wide reductions are necessary.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Sustainability, Resilience and Innovation Group

- **Sustainability, Resilience and Innovation Group Manager Report**

Summary

To report on Sustainability, Resilience and Innovation activities for February 2025

Purpose

Informational

Detailed Report

SRI Core Activities

SRI and the Core Planning Team for the Climate Adaptation Master Plan for Water (CAMP4W) finalized the 2024 CAMP4W Annual Report providing updates on Signposts, Time-Bound Targets, and Implementation Highlights. The initial draft of the CAMP4W Implementation Strategy and Working Memorandum #10 on the Climate Adaptation Policy Framework were discussed with the Task Force at the February 26, 2025 meeting. An Environmental Listening Session was held on February 3 to seek input on the draft Annual Report and address questions. The Chief SRI Officer participated in an episode of the Talking Water Podcast on California Water issues and attended the *Innovate Locally to Inspire Change Globally Summit*, co-hosted by the Governor's Office of Land Use & Climate Innovation, University of California, and Vatican's Pontifical Academy of Sciences.

Sustainability and Resilience

Sustainability and Resilience section staff coordinated the Water Energy Climate Sustainability (WECS) team meeting on February 4. WECS meets bimonthly and provides an opportunity for staff in different disciplines across the district to share project updates and collaborate on ideas.

Zero Emission Vehicle (ZEV) Transition: On February 13, the ZEV Executive Task Force met to discuss progress on Metropolitan's transition to electric vehicles. The cross-organizational management team and staff discussed the latest vehicle purchases and charger installations, financing options for ZEV purchases, and potential regulatory and legislative impacts resulting from changes implemented by the new federal administration.

Centralized Grants and Research Management Office

Staff developed a Fire Recovery/FEMA resources SharePoint site and held a meeting on February 5, 2025 with Foothill Municipal Water District and sub-agency staff. The meeting agenda included:

Overview of Altadena and Pasadena Water infrastructure

Recovery experience from 2017 Tubbs Fire

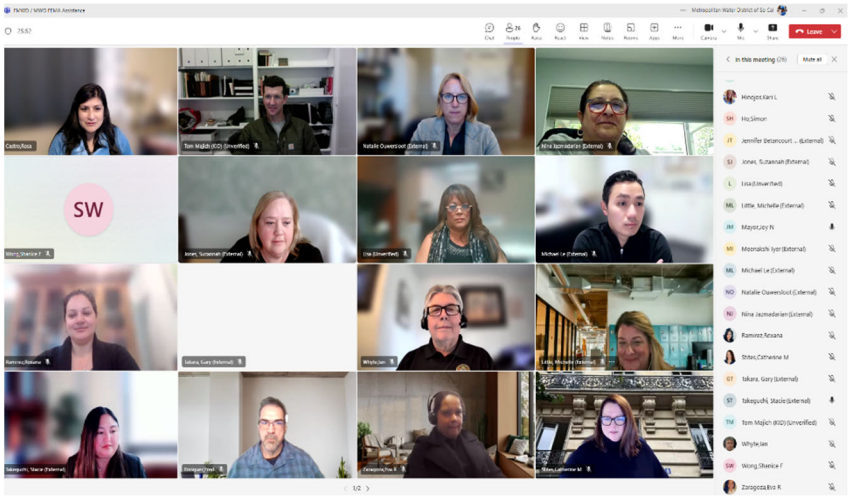
- Ben Sherwood, Sonoma Water, Assistant General Manager for Business Services & External Affairs
- Emma Walton, Operations Manager, Sonoma Water

Date of Report: March 10, 2025

FEMA Fact Sheet and Best Management Practices

- Michelle Little, Witt O'Brien's, Director
- Suzannah Jones, Witt O'Brien's, Associate Managing Director

Suzannah is an Associate Managing Director with our Community and Infrastructure Services Team and focuses on FEMA recovery. She has more than 20 years of experience supporting clients and disasters across the country, including but not limited to Texas, Tennessee, North Carolina, etc. She was actively involved with nearly 20 Federal disaster declarations in Texas alone. Prior to joining Witt O'Briens (WOB), she served as the Deputy Chief of Recovery and Mitigation for Texas Department of Emergency Management. She is also a Certified Emergency Manager.



Attendees were reminded of the Request for Public Assistance Submission Deadline: March 9, 2025 (via Grants Portal). WOB is a Metropolitan grants/funding consultant and will support and meet with the Fire Recovery group. A library with reference materials, templates, and sample reports from WOB is now available on the SharePoint site.

Innovation, Pilots, and Emerging Technologies

Peer-2-Peer Engagements: Innovation staff worked with Metropolitan executives and group managers to complete an updated District needs assessment, facilitated by the *Knowledge to Implementation* (K2i). The identified District challenges will be the basis of future K2i peer-2-peer engagements that provide Metropolitan staff the opportunity to learn innovative practices from global leading utilities. Metropolitan has also received requests for peer-2-peer engagements by water agencies interested in learning about the District's investments in emergency management and recent experiences with mutual aid during the Palisades and Eaton Canyon fires.

Environmental Planning Services

Environmental Planning Section staff continued to prepare the second draft Environmental Impact Report for the Pure Water Southern California program. Staff continued coordination with the California Department of Fish and Wildlife regarding the Incidental Take Permit application and mitigation options for species impacts from the Inland Feeder/Foothill Pump Station Intertie Project and continued coordination with the U.S. Bureau of Reclamation (USBR) regarding consultations with the U.S. Fish and Wildlife Service under the Endangered Species Act and the State Historic Preservation Office under Section 106 of the National Historic Preservation Act. For the Webb Tract Wetland Restoration Project, staff continued preparation of the Statutory Exemption Restoration Program application for submittal to CDFW and supported the public outreach meeting held on February 11, 2025. Environmental monitoring of construction activities continued for the Rialto Pipeline Rehabilitation, Perris Valley Pipeline, Colorado River Aqueduct (CRA) Conveyance System Flow Sensors Installation, Prestressed Concrete Cylinder Pipe Second Lower Feeder Reach 3B, Weymouth Basins 5 to 8 Rehabilitation, Weymouth Asphalt Rehabilitation, and La Verne Shops Upgrades projects.

Critical operations and maintenance activities were supported by the Environmental Planning Section. Staff provided California Environmental Quality Act and regulatory clearances and conducted pre-construction biological resource surveys and construction monitoring for activities throughout the service area, including upcoming shutdowns (CRA, Yorba Linda Feeder, San Diego Pipeline Nos. 1 and 2, and Rialto Feeder). EPS staff provided subject matter expert reviews of legislative bills, including AB 295 (Macedo), AB 300 (Lackey), AB 362 (Ramos), AB 367 (Bennett), AB 372 (Bennett), SB 231 (Seyarto), and SB 232 (Seyarto). In addition, staff reviewed and analyzed CEQA notices for four external projects to determine the potential impacts on Metropolitan and protect Metropolitan's right-of-way and facilities; comments letters were prepared and submitted for those projects that had the potential for impacts.

Environmental Planning Section continued oversight of reserve management activities to protect valuable natural resources and meet Metropolitan's mitigation obligations. Security patrols were conducted throughout the Lake Mathews Multiple Species Reserve and the Southwestern Riverside County Multi-Species Reserve (MSR) to prevent trespassing, vandalism, poaching, and theft and to protect the reserves' natural and cultural resources, facilities, and equipment. Activities at the Lake Mathews Reserve included the application of pre-emergent herbicide to prevent the regrowth of noxious weeds in the 2025 growing season, servicing wildlife cameras at artificial burrowing owl mounds north of Lake Mathews to document burrowing owl/wildlife activity, and repairing patrol roads and fencing. Activities at the MSR included processing the 2024 Christmas Bird Count data from the event at Diamond Valley Lake (117 species and 4,911 individual birds were observed, including 11 of 12 of the species covered by the MSR's Multi-Species Habitat Protection Plan), coordinating with researchers conducting Quino checkerspot butterfly and northern harrier surveys, approving a herpetology/small mammal project, and planting in the Tucalota Creek restoration site and in upland restoration sites across the reserve.

Burrowing owl and artificial burrow at the Southwestern Riverside County Multi-Species Reserve

Land Management

A new lease has been executed with Bouldin Farming Company comprising the entirety of Webb Tract in the Bay Delta. The lease is for an eight-month term to allow the farming of a winter wheat crop and to offset Metropolitan's land maintenance costs. Staff is working towards securing a long-term lease through an RFP process.

One Water and Adaptation Committee

Office of Sustainability, Resilience and Innovation Activities

Item 7a
March 10, 2025

Report on Activities from Office of Sustainability, Resilience and Innovation

Subject

Report on Activities from Office of Sustainability, Resilience and Innovation

Purpose

To provide management announcements and highlights of SRI

New Staff

Building Expertise

Chris Foley, Principal Resource Specialist – Grants & Research

Ursula Schmidt, Climate Action Plan Program Manager

Patrick Atwater, Innovation Program Manager

New Technology

Renewable Energy Demonstration

Potential Uses of Mobile Solar Energy

- EV charging while long-term charging infrastructure is built
- Power at shutdowns and other field operations and maintenance work
- Power for electric tools and equipment
- Electrical backup resilience during power outages

New Grant

Electric Vehicle Charging

BetterFleet Charging Software

- Metropolitan is a fleet partner on grant project with BetterFleet
  - Leading software company focused on transition to ZEV fleets
  - California Energy Commission grant to provide resilience to the California grid
- Software deployed on new and existing EV charging stations at Weymouth
- Fleet staff will use the software for 2 years, provide load sharing information to optimize charging and grid capacity utilization


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

Water Resource Management Group

- **Water Resource Management February Activities**

Summary

The Water Resource Management Group February 2025 Monthly Activities

Purpose

Informational

Detailed Report

Manage Existing and Develop New Regional Water Management Programs to Maintain Water Supply Reliability in the Face of Increasing Water Supply Volatility

West Basin Municipal Water District (West Basin) and the Los Angeles Community College District held a ribbon-cutting ceremony to inaugurate the implementation of recycled water at Los Angeles Southwest College on February 6, 2025.

Los Angeles Southwest College is the first of the nine Los Angeles Community Colleges to convert their irrigation from potable to recycled water. The estimated annual water savings is 76 acre-feet, and the project will receive approximately $150,000 from the On-Site Retrofit Program. Staff attended the ribbon cutting to recognize the efforts of West Basin, the Los Angeles Community College District, and Los Angeles Southwest College. *Strategic Priority 3.2.8 "Increase outdoor water use efficiency."*

Photo: Metropolitan Director Desi Alvarez, representing West Basin (third from right) alongside representatives from Los Angeles Southwest College and the Los Angeles Community College District posed for a photo prior to the purple ribbon cutting.

Date of Report: March 10, 2025

Metropolitan prepared its 25th annual achievements report to the California State Legislature titled Achievements in Conservation, Recycling & Groundwater Recharge pursuant to sections 130.5 and 130.7 of the Metropolitan Water District Act. SB 60 by Senator Tom Hayden (Chapter 415, Statutes of 1999) requires that Metropolitan provide an annual overview to the Legislature, which outlines its progress in achieving an increased emphasis on cost-effective conservation, recycling, and groundwater recharge programs. On January 28, 2025, Metropolitan submitted the annual report to the Legislature which highlighted achievements from July 2023 through June 2024. *Strategic Priority 3.2: "Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate."*

Maintain and Enhance Groundwater Production in Metropolitan's Service Area

Staff participated in a coordination meeting between Metropolitan, the Coachella Valley Water District (CVWD), and the Desert Water Agency (DWA) on February 3, 2025. At the meeting, staff provided an update on the Perris Seepage Recovery Project to CVWD and DWA, who are funding partners in the project with Metropolitan and the California Department of Water Resources (DWR). The project update included an overview of the project timeline, background on the project purpose, the current groundwater modeling work being conducted by DWR's consultant, and a budget update. The ongoing groundwater modeling work is investigating the potential of Per- and polyfluoroalkyl substances present in the groundwater basin, to reach the project's recovery wells if they are built and operated as designed. *Strategic Priority 3.2: "Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate."*

Collaborate with Member Agencies, Water Agencies, and Associations, and Provide Leadership for Policy Development, Advocacy, Outreach, and Education

On January 22, staff provided an update on Southern California's current water supply and demand at the Southern California Water Dialogue. Additionally, staff highlighted recent actions taken by Metropolitan to help advance towards Metropolitan's targets on core supply, storage, and flex supply.

On February 3, staff presented WRM's water supply reliability signposts in a Climate Action Master Plan for Water, February 2025 Environmental Listening Session.

On February 5, staff attended and participated on a panel at the CalDesal 2025 Annual Conference. The panel focused on the regional potential to facilitate partnerships and co-development of locally developed and produced water supplies among local agencies.

On February 27, staff provided an overview of the Metropolitan's water supply and storage portfolio at the Groundwater Management Districts Association's 2025 Winter Conference.

Metropolitan is a founding member of The Water Utility Climate Alliance, which is a consortium of 12 of the largest water utilities in the United States and has focused on climate change planning, science, and adaptation since 2007. The Water Utility Climate Alliance recently published *"CMIP6 Frequently Asked Questions (FAQ): A Resource for Water Managers."* The publication is intended for water utility managers with little to no previous experience or exposure with CMIP6 climate model projections, emissions scenarios, and other climate-model datasets. It includes a dozen or so highly relevant questions — and clear responses — to aid in the use and interpretation of CMIP6 datasets and emissions scenarios and to provide a glimpse at the state of the science in climate change modeling. *Strategic Priority 5.1: "Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits" and Strategic Priority 3.2: "Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate."*

Implement Regional Conservation Program

Staff held a Water Efficient Landscape Dual Certification Program session in Spanish in conjunction with the Municipal Water District of Orange County and the Moulton Niguel Water District for 40 landscape professionals. Staff held a Water Efficient Landscape Dual Certification Program session in Mission Hills in partnership with the Los Angeles Department of Water and Power for 40 landscape professionals.

Staff participated in a Panel discussion at a meeting of the American Society of Golf Course Architects (ASGCA) on February 4, 2025. The meeting was dedicated to highlighting sustainability efforts at golf courses around the country. The panel focused on increasing water use efficiency, and adoption of best management practices for irrigation at all golf courses. The meeting was held at the San Diego Convention Center and is part of this year's Golf Course Superintendents Association of America Conference and Trade Show.

Photo: Gary Tilkian, Senior Resource Specialist of the Water Resource Management Groups Water Efficiency Team, speaking to the ASGCA panel on February 4, 2025.