

The Metropolitan Water District of Southern California

Agenda

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

OW&S Committee

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

One Water and Stewardship Committee - Final - Revised 1

Meeting with Board of Directors *

April 10, 2023

11:30 a.m.

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. A listen only phone line is available at 1-877-853-5257; enter meeting ID: 873 4767 0235. Members of the public may present their comments to the Board or a Committee on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference (833) 548-0276 and enter meeting ID: 876 9484 9772 or click <https://us06web.zoom.us/j/87694849772pwd=V3dGZGRYUjJ3allqdUxXTIJRM044Zz09>

Monday, April 10, 2023 Meeting Schedule

**09:00 a.m. EOT
11:00 a.m. Break
11:30 a.m. OWS
01:30 p.m. LRAC
03:00 p.m. EIA**

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

Teleconference Locations:

Fullerton City Hall Council Chambers • 303 W. Commonwealth Avenue • Fullerton, CA 92832

5707 Ocean View Boulevard • La Canada, CA 91011

8700 Beverly Boulevard, Ste M313 • Los Angeles, CA 90048

Los Angeles Cleantech Incubator (LACI), 525 S. Hewitt Street, Los Angeles, CA 90013

* 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 One Water and Stewardship Committee for March 14, 2023 (Copies have been submitted to each Director, Any additions, corrections, or omissions) [21-2086](#)

Attachments: [04102023 OWS 2A \(03142023\) Minutes](#)

3. **CONSENT CALENDAR ITEMS - ACTION**

- 7-7 Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux Community Services District assistance with water deliveries; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [DEFERRED 4/4/23] [21-2060](#)

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

4. **OTHER BOARD ITEMS - ACTION**

NONE

5. **BOARD INFORMATION ITEMS**

- 9-2 Update on Chino Basin Program Development with Metropolitan and Inland Empire Utilities Agency [21-2061](#)

Attachments: [04112023 OWS 9-2 B-L](#)
[04112023 OWS 9-2 Presentation](#)

6. **COMMITTEE ITEMS**

- a. Update on Delta Conveyance Project [21-2088](#)

Attachments: [04102023 OWS Item 6a Presentation](#)

- b. Update on Voluntary Agreements [21-2089](#)

Attachments: [04102023 OWS Item 6b Presentation](#)

- c. Update on results from Household Water Use Study [21-2092](#)

Attachments: [04102023 OWS Item 6c Presentation](#)

- d. Update on Metropolitan's activities related to non-functional turf [21-2093](#)

Attachments: [04102023 OWS Item 6d Presentation](#)

- e. Update on Water Surplus and Drought Management [21-2090](#)

Attachments: [04112023 OWS 6e Report](#)
[04102023 OWS Item 6e Presentation](#)

- f. Update on Conservation [21-2091](#)

Attachments: [04102023 OWS Item 6f Presentation](#)

7. MANAGEMENT REPORTS

- a. Colorado River Manager's Report [21-2083](#)

Attachments: [04102023 OWS 7a Report](#)

- b. Bay-Delta Manager's Report [21-2084](#)

Attachments: [04102023 OWS 7b Report](#)

- c. Water Resource Management Manager's Report [21-2085](#)

- d. Quarterly Update from the Chief Sustainability Resiliency and Innovation Office [21-2094](#)

Attachments: [04102023 OWS Item 7d Presentation](#)

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

March 14, 2023

Chair Quinn called the teleconference meeting to order at 9:05 a.m.

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

Members Absent: Petersen and Sutley

Other Board Members present: Board Chair Ortega, Directors Alvarez, Atwater, Camacho, De Jesus, Dennstedt, Dick, Fellow, Garza, Jung, Kassakhian, Luna, McCoy, McMillan, Morris, Pressman, Ramos, Seckel, and Smith.

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

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

Public speakers included:

1. Bob Tincher, Deputy General Manager, San Bernardino Valley Municipal Water District
 2. Caty Wagner, Sierra Club California
 3. Brian Laddusaw, Rubidoux Community Services
-
2. Opportunity for Directors who are not members of the committee to address the committee on matters within the committee's jurisdiction

No members responded.

Chair Quinn made announcements related to the Consent Calendar Action item and the re-ordering of the agenda.

3. CONSENT CALENDAR ITEM – ACTION

- A. Approval of the Minutes of the One Water and Stewardship Committee for January 9, 2023.

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

4. CONSENT CALENDAR OTHER ITEM – ACTION

7-8 Subject: Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux Community Services District assistance with water deliveries; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: Jessica Arm, Associate Resource Specialist

Motion: The committee chair announced that this item would be heard for discussion only.

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

The following Directors provided comments or asked questions:

- | | |
|---------------|-------------|
| 1. Armstrong | 6. Smith |
| 2. Fong-Sakai | 7. Peterson |
| 3. Alvarez | 8. Cordero |
| 4. Goldberg | 9. Ortega |
| 5. Kurtz | 10. Dick |

Staff responded to Directors' comments and questions.
The committee did not take action on item 7-8.

Chair Quinn announced Agenda item 7c.

7. COMMITTEE ITEMS

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

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

Ms. Razavian provided a presentation that included updates on current water supply demand balance, hydrological conditions, and the Emergency Conservation Program.

The following Directors provided comments or asked questions:

1. Peterson
2. Lefevre

Staff responded to questions.

Chair Quinn announced that the meeting would return to the Consent Calendar.

4. CONSENT CALENDAR OTHER ITEM – ACTION

- 7-9 Subject: Consider changes to the Water Shortage Emergency Condition and the Emergency Water Conservation Program for the State Water Project dependent area and reaffirm the Regional Drought Emergency for all member agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA
- Presented by: Brad Coffey, Manager, Water Resource Manager
- Motion: Remove the Water Shortage Emergency Condition declared on April 26, 2022, for the SWP Dependent Area, terminate the Emergency Water Conservation Program and application of any penalties accrued, and reaffirm the Regional Drought Emergency declared on December 13, 2022

Mr. Coffey gave a presentation on the proposed changes to the Water Shortage Emergency Condition and the Emergency Water Conservation Program for the State Water Project Dependent Area and reaffirm the Regional Drought Emergency for all member agencies.

The following Directors provided comments or asked questions:

- | | |
|-------------|--------------|
| 1. Peterson | 5. Armstrong |
| 2. Pressman | 6. Kurtz |
| 3. Ortega | 7. Smith |
| 4. Fellow | 8. Lefevre |

Staff responded to comments and questions.

Following a group discussion, Director Lefevre made a motion, seconded by Director Kurtz to approve the Consent Calendar items 3A, 3B, and 7-9 that included the following modified motion for item 7-9.

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

The vote was:

Ayes: Directors Ackerman, Alvarez, Armstrong, Chacon, Cordero, De Jesus, Erdman, Faessel, Fong-Sakai, Goldberg, Kurtz, Lafevre, Miller, and Peterson.

Noes: None.

Abstentions: None.

Absent: Directors Petersen, Quinn, and Sutley.

The motion for items 3A, 3B, and 7-9 passed by a vote of 14 ayes, 0 noes, 0 abstentions, and 3 absent.

5. OTHER BOARD ITEMS

None

6. BOARD INFORMATION ITEMS

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

Presented by: Tracy Abundez, Resource Specialist, Water Acquisition Team

Ms. Abundez's presentation provided an update on the status, costs, and water quality of the High Desert Water Bank (HDWB) Program with Antelope Valley – East Kern Water Agency (AVEK).

The following Directors provided comments or asked questions:

1. Erdman
2. Fong-Sakai
3. Miller
4. Lefevre

5. Peterson
6. Alvarez
7. Seckle

Staff responded to comments and questions.

7. COMMITTEE ITEMS

- a. Subject: Proposed Grant Opportunity for Webb Tract

Presented by: None.

This item was not presented due to time constraints.

- b. Subject: Update on Watershed Initiatives

Presented by: Jennifer Nevills, Program Manager, Bay-Delta Initiatives

Ms. Nevills gave a presentation with an update on watershed activities and explained Metropolitan's work on upper watersheds, participation on protecting State Water Project source water, and innovative partnerships.

Chair Quinn requested that any questions related to this agenda item be directed to staff following this meeting.

- d. Subject: Update on Conservation

Presented by: None.

There was no acknowledgment of this item.

8. MANAGEMENT REPORTS

- a. Subject: Colorado River Manager's Report

Presented by: Bill Hasencamp, Manager, Colorado River Resources

Mr. Hasencamp provided an update on Colorado River activity including Lake Powell, Lake Mead, seven states collaborative effort for Supplemental Environmental Impact Study for near-term Colorado River operations.

- b. Subject: Bay-Delta Manager's Report

Presented by: Nina Hawk, Manager, Bay Delta Initiatives

Ms. Hawk gave an update on two Executive Orders that were signed by Governor Newsom. The first one accelerates groundwater recharge and reduces flooding, and suspends regulations and restrictions on permitting and use, to enable diversions of flood stage water. The second would ensure adequate water supplies for health, safety, the environment, cold water pools and drought resilient water supplies, and call on the State Board to consider modifying reservoir release and diversion requirements.

c. Subject: Water Resource Management Manager's Report

Presented by: None

This item was not heard.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

None

10. ADJOURNMENT

The next meeting will be held on April 10, 2023

The meeting adjourned at 12:06 p.m.

Tracy Quinn
Chair



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

4/11/2023 Board Meeting

9-2

Subject

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

Executive Summary

This letter provides an update on activities pertaining to the Chino Basin Program (CBP). Since 2018, Metropolitan staff has been working with Inland Empire Utilities Agency (IEUA) to facilitate the CBP, a Proposition 1 Water Storage Investment Program. The CBP accomplishes three main goals: stores advanced treated recycled water, allows for environmental pulse flows for fishery benefit, and provides a replacement water supply to facilitate the exchange. Under the proposed program, IEUA would invest in local infrastructure to produce and store 375,000 acre-feet (AF) of advanced treated recycled water to be exchanged over a 25-year term. This stored water would be exchanged for an equivalent portion of Metropolitan's State Water Project (SWP) Table A allocation. To make Metropolitan's water supply whole, an equivalent amount of stored water would be delivered to Metropolitan's distribution system directly or by in-lieu pumping to meet IEUA service area demands. The exchange would only occur during years when the Department of Water Resources (DWR) determines that SWP operations and SWP contractor supplies would not be at risk. As such, the state would not request an exchange in critically dry years. Additionally, Metropolitan and IEUA are exploring the feasibility of a potentially expanded storage and recovery program that could leverage planned CBP infrastructure. Updates on the development of the CBP and the potential storage and recovery program are detailed below.

Details

Background

California's Proposition 1 in 2014 allocated \$7.5 billion for water system investments, with \$2.7 billion dedicated to the implementation of the Water Storage Investment Program (WSIP). The California Water Commission (CWC) selected eight projects to conditionally fund under the WSIP based on their associated public benefits. Inland Empire Utilities Agency's (IEUA) Chino Basin Program (CBP) is among the conditionally funded projects within Metropolitan's region. The CBP's original conditional WSIP funding was \$206.9 million. It has since been increased twice for an inflation adjustment, with the latest funding amount totaling \$215.2 million. In 2021, Metropolitan provided a letter of intent to continue collaborating with IEUA as its potential facilitating SWP contractor. Staff presented updates on the Prop 1 WSIP projects and an overview of the CBP in June 2021 and March 2022. In April 2022, the Board authorized the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan Water District/Inland Empire Utilities Agency Exchange Agreement. Staff has since been working with IEUA on further developing both the overall program and the Metropolitan/IEUA Exchange Agreement.

Chino Basin Program Overview

The CBP is an innovative advanced treatment, storage, water exchange, and reliability program. The CBP would exchange advanced treated recycled water stored in the Chino Basin for an equivalent amount of SWP supply to provide additional flow to improve fisheries in the Feather River. Under the CBP, IEUA would construct an advanced water treatment facility to treat up to 15,000 AF of recycled water per year. After treatment, the recycled water would be stored in the Chino Basin groundwater basin using distribution facilities and injection

wells constructed as part of the CBP. The CBP would also include the construction of distribution facilities to pump and deliver extracted groundwater to Metropolitan's distribution system and to IEUA's member agencies.

As part of the water exchange agreement with the state, IEUA would agree to store up to 375,000 AF of advanced treated recycled water in the Chino Basin over a 25-year period. The exchange would provide a water supply for pulse flows released from Oroville Reservoir into the Feather River, benefitting both Chinook salmon and the surrounding ecosystem. IEUA and the state would agree to an amount of stored water to be delivered to Metropolitan and its service area in exchange for an equivalent amount of Metropolitan's SWP Table A allocation. That exchanged SWP Table A supply is the physical water supply that would be used for the pulse flows released from Oroville Reservoir into the Feather River.

To complete the exchange, IEUA would extract stored groundwater from the Chino Basin and deliver it to Metropolitan's distribution system directly or by in-lieu pumping to meet IEUA service area demands to substitute for the equivalent amount of SWP Table A allocation. Thus, Metropolitan and its service area would remain whole in terms of water supply. The exchange would only occur during years when the DWR determines that SWP operations and SWP contractor supplies would not be at risk. As such, the state would not request an exchange in critically dry years.

After the program term, the stored water remains under IEUA's ownership and could be used to satisfy local supply. The program also includes an emergency use provision, where up to 40,000 AF of stored Chino Basin water could be borrowed by Metropolitan for use within its service area.

Metropolitan's Role as a Facilitating State Water Contractor

A key component of the CBP requires SWP supplies that are stored in Lake Oroville to be exchanged and used to provide pulse flows in the Feather River. Since IEUA is not an SWP contractor, IEUA requested Metropolitan's participation in the CBP. As such, Metropolitan would agree to facilitate the exchange of SWP supplies and stored water in the Chino Basin and participate in necessary related agreements. Agreement terms will be negotiated to ensure Metropolitan will not be negatively impacted by its participation. The CBP will provide for environmental, local, and regional benefits for multiple parties, including Metropolitan, and is being developed under a tenet of "No Harm," meaning that its development and operation cannot adversely affect any of the parties or participants in the program. This tenet extends to the SWP and its contractors, to Metropolitan and its service area, and to IEUA and its member local agencies.

Program Development

In April 2022, the Board authorized the General Manager to negotiate an agreement consistent with the draft terms presented for the Metropolitan/IEUA Exchange Agreement. Staff has since been working on writing the Metropolitan/IEUA Exchange Agreement and supporting overall CBP activities and program development. Key program milestones since the last update include the following:

- May 2022 – Certification and adoption of the CBP Program Environmental Impact Report was approved by the IEUA Board of Directors. Additionally, IEUA formalized the CBP Partnership with Cucamonga Valley Water District (CVWD), Metropolitan Water District, Jurupa Community Services District (JCSD), and Fontana Water Company (FWC)
- August 2022 – IEUA held the CBP Expo to provide an overview of the various facility components to stakeholders and the public. Metropolitan also participated in the Expo with a booth related to imported supplies and their role in the CBP.
- October 2022 – IEUA finalized the term sheet for the purchase agreement of 3,500 AFY of recycled water from the City of Rialto at a fixed rate for a 50-year term. The preliminary design work also began for the CBP facilities, which consists of the Advance Water Purification Facility, the recycled water interconnection to the City of Rialto, and the injection wells.
- January 2023 – IEUA and Metropolitan held a kick off for the development of the IEUA/Metropolitan Exchange Agreement based on the Board-approved terms. IEUA, CVWD, and FWC also held a kick off meeting for the development of their local partners' CBP term sheet.

Study to Explore Expanded Storage and Recovery Program (Augmented CBP)

In May 2022, Metropolitan co-funded a study with IEUA to explore the feasibility of a larger storage and recovery program that could leverage CBP infrastructure. This expanded storage and recovery program is referred to as Augmented CBP (ACBP) or CBP+. An expanded storage and recovery program could provide additional storage in an otherwise SWP Dependent Area of Metropolitan's service area. It could also serve as a replacement for the current dry-year yield program, which expires in 2028. The study will examine storage quantities of 100,000 AF, 200,000 AF, and 300,000 AF and identify required infrastructure, potential configurations, and preliminary cost estimates. The study is currently scheduled to be completed by May 2023.

Next Steps

Metropolitan will continue working with IEUA to further develop the CBP. Staff will return for Board approval of all agreements to which Metropolitan is a party, including approval of final MWD/IEUA Exchange Agreement terms. The CWC is expected to award final WSIP funding for the CBP in fall 2023. Additionally, staff will continue to collaborate with IEUA on assessing the findings of the Augmented CBP study results.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By the 1999 Strategic Plan Policy Principles, Metropolitan is a regional provider of water for its service area and a steward of regional infrastructure.

By the General Manager's Business Plan for FYs 2020/21 and 2021/22, one of Metropolitan's strategic priorities is to promote sustainability.


By Minute Item 42287, dated February 11, 1997, the Board adopted a set of policy principles on water recycling.

Fiscal Impact

None


 Brad Coffey
 Manager, Water Resource Management

4/3/2023
Date


 Adel Hagekhalil
 General Manager

4/4/2023
Date



One Water and Stewardship Committee

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

Item 9-2

April 10, 2023

Previous Board Briefings

June 2021

- Staff presented an update on Prop 1 Water Storage Investment Program (WSIP) projects and an overview of the Chino Basin Program
- Metropolitan provided a letter of intent

March 2022

- Staff presented an update on the Chino Basin Program and pending terms of agreement with IEUA

April 2022

- Board authorized the General Manager to negotiate an agreement consistent with the draft terms of the Metropolitan/IEUA Exchange Agreement

Proposition 1 Recap



- Proposition 1 approved \$7.5 billion of funding (Nov 2014)
 - \$2.67 billion specifically for water storage projects with public benefits through the Water Storage Investment Program (WSIP)
- California Water Commission (CWC) is the state administrator for the WSIP
- Chino Basin Program (CBP), proposed by Inland Empire Utilities Agency (IEUA), was awarded conditional funding of \$215M
 - Metropolitan is a facilitating partner and is not providing direct financial contribution to project costs

Chino Basin Program WSIP Framework



CBP Accomplishes Three Main Goals:

- Provides storage of advanced treated recycled water in the Chino Basin
- Allows for environmental pulse flows for fishery benefit
- Provides replacement water supply in Metropolitan service area

Metropolitan's participation is two-fold:

- Reduce SWP Table A deliveries in a pulse flow call year
- Take delivery of stored CBP groundwater in substitution for reduced SWP Table A deliveries

CBP Activities

August 2022

- IEUA held CBP Expo to inform stakeholders and public
- Metropolitan participated in Expo to discuss role in CBP

January 2023

- IEUA/Metropolitan kick off for Exchange Agreement
- IEUA, Coachella Valley Water District, Fontana Water Company kick off for local partners' CBP term sheet

May 2022

- Certification and adoption of CBP Program EIR by IEUA Board of Directors
- Formalized CBP partnership with Metropolitan, Cucamonga Valley Water District, Fontana Water Company, Jurupa Community Services District

October 2022

- IEUA finalized City of Rialto term sheet agreement for purchase of 3,500 AFY recycled water
- IEUA began preliminary design work for select CBP facilities

Augmented CBP Study (ACBP)



- Staff is participating in a study with IEUA to evaluate an expanded regional storage and recovery program (Augmented CBP)
- Considerations for ACBP:
 - Replace expiring dry year yield (DYY) program
 - Leverage capital investment from CBP
 - Provides storage for use by Metropolitan's service area
 - Provides multiple benefits to the Chino Basin
- Study is examining three levels of storage: 100 TAF, 200 TAF, 300 TAF
 - Includes variation for using Pure Water Southern California as a source
 - Study completion expected in May 2023

Next Steps

- Continue collaboration with IEUA on necessary agreements
- Provide as needed input on CBP Preliminary Design Report
- Explore feasibility of potential Augmented CBP





One Water & Stewardship Committee

Update on Delta Conveyance Project

Item 6a

April 10, 2023

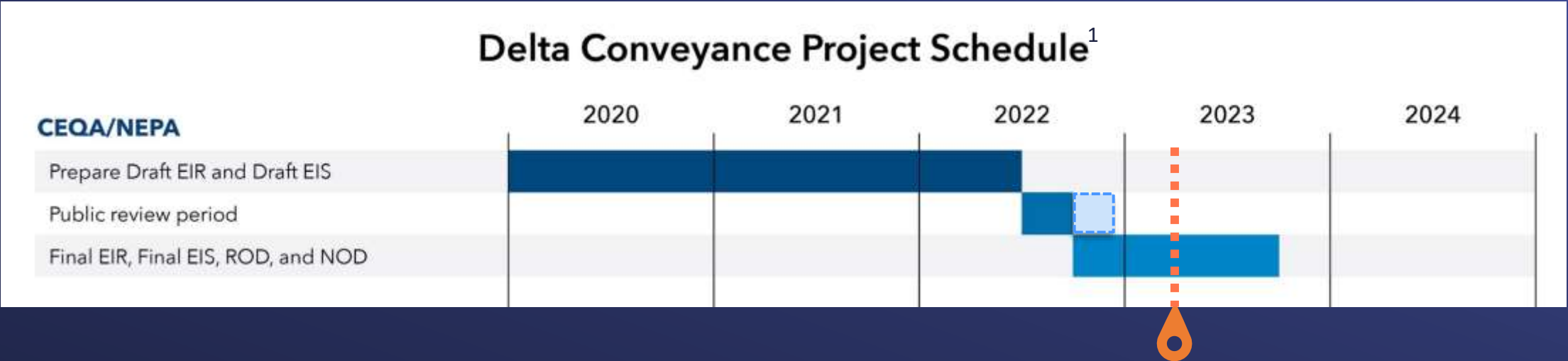
Update on Delta Conveyance Project

Overview

- Planning Timeline
- Governance Updates
 - Delta Conveyance Design and Construction Authority
 - Delta Conveyance Finance Authority
- Environmental Planning Updates
 - Draft Environmental Impact Report
 - Draft Environmental Impact Statement

Delta Conveyance Project Planning Timeline

Delta Conveyance Project Planning Timeline



¹Department of Water Resources (DWR) extended Draft Environmental Impact Report (DEIR) public review period of 90 days with an end date of October 27, 2022 to December 16, 2022, light blue shaded box captures this timeline modification. Proposed Delta Conveyance Project timeline is subject to change.

Delta Conveyance Project Governance Updates

Delta Conveyance Design and Construction Authority and the Delta Conveyance Finance Authority



Background

- Joint powers authority agencies
- Governance
- Focus

Delta Conveyance Governance

Delta Conveyance Design and Construction Authority (DCA): Seven-Member Board



SARAH PALMER
President



MARTIN MILOBAR
Vice President



GARY MARTIN
Secretary



ADNAN ANABTAWI
Director



ROBERT CHENG
Director



TONY ESTREMEREA
Director



MIGUEL LUNA
Director

Delta Conveyance Finance Authority (DCFA): Eleven-Member Board



Paul Sethy
President



Russell Lefevre
Vice President



Robert Cheng
Secretary



Lynne Chaimowitz
Director



Lance Eckhart
Director



Barbara Keegan
Director



Mark Krause
Director



Valerie Pryor
Director



Cindy Saks
Director

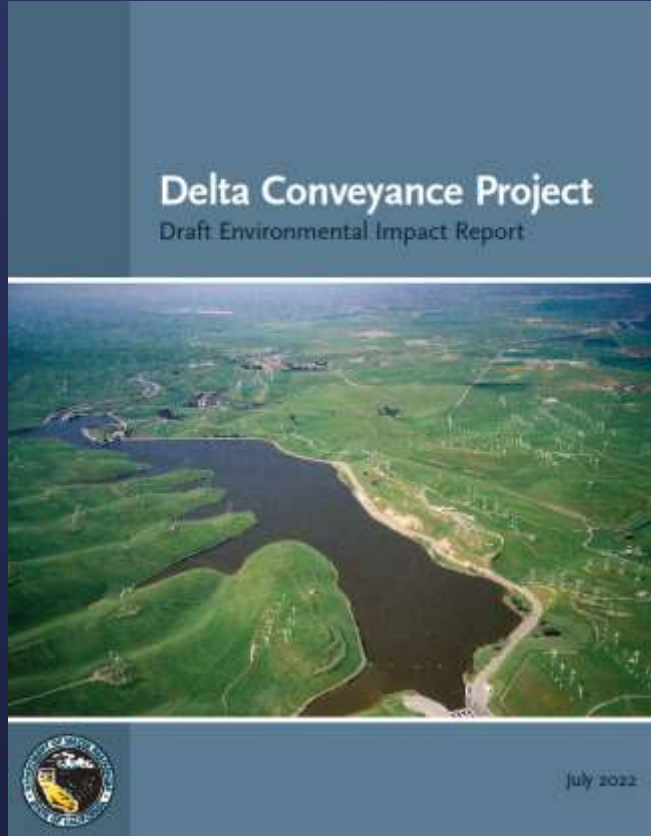


Matthew Stone
Director



Peter Thompson
Director

Delta Conveyance Project Environmental Planning Updates



Draft Environmental Impact Report

- Public review period closed December 16, 2022
- Received over 700 unique letters with over 6,000 individual comments
- Organizing comments and developing responses
- Final EIR is expected at the end of 2023

Draft Environmental Impact Statement

- Public review period closed March 16, 2023
- Three virtual public meetings were held during the review period
- One in-person public meeting was held in Stockton
- Currently organizing comments







One Water and Stewardship Committee

Update on Voluntary Agreements

Agreements to Support Healthy Rivers and Landscapes

Item 6b

April 10, 2023





Agreements Update


Agenda






- Overview and Schedule Update
- Scientific Basis Report
- Conclusions and Next Steps

Agreements Overview




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Agreements to Support Healthy Rivers and Landscapes

HOW THE AGREEMENTS WORK

WHY ARE THE AGREEMENTS NEEDED?

THE AGREEMENTS AND THE ENVIRONMENT

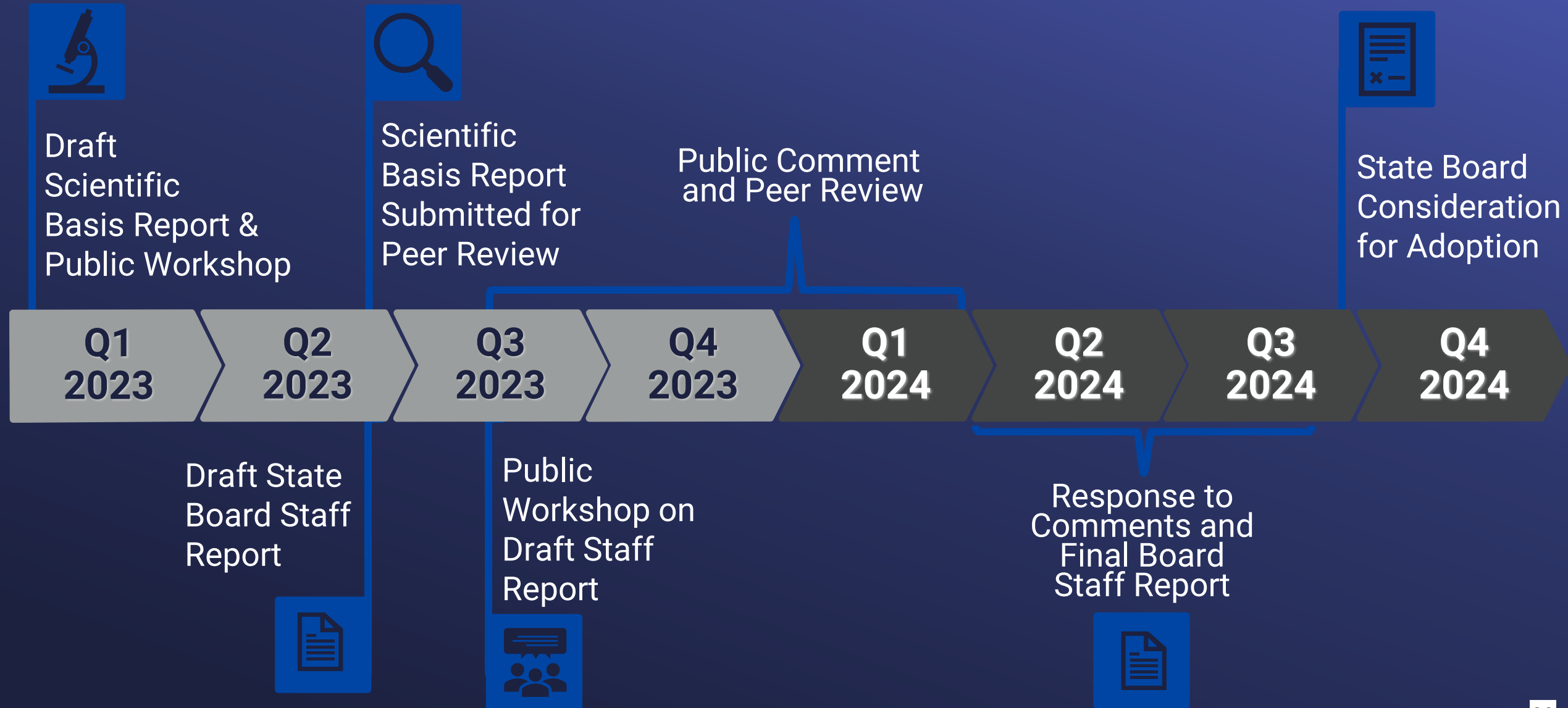
AGREEMENT COLLABORATORS

RESOURCES

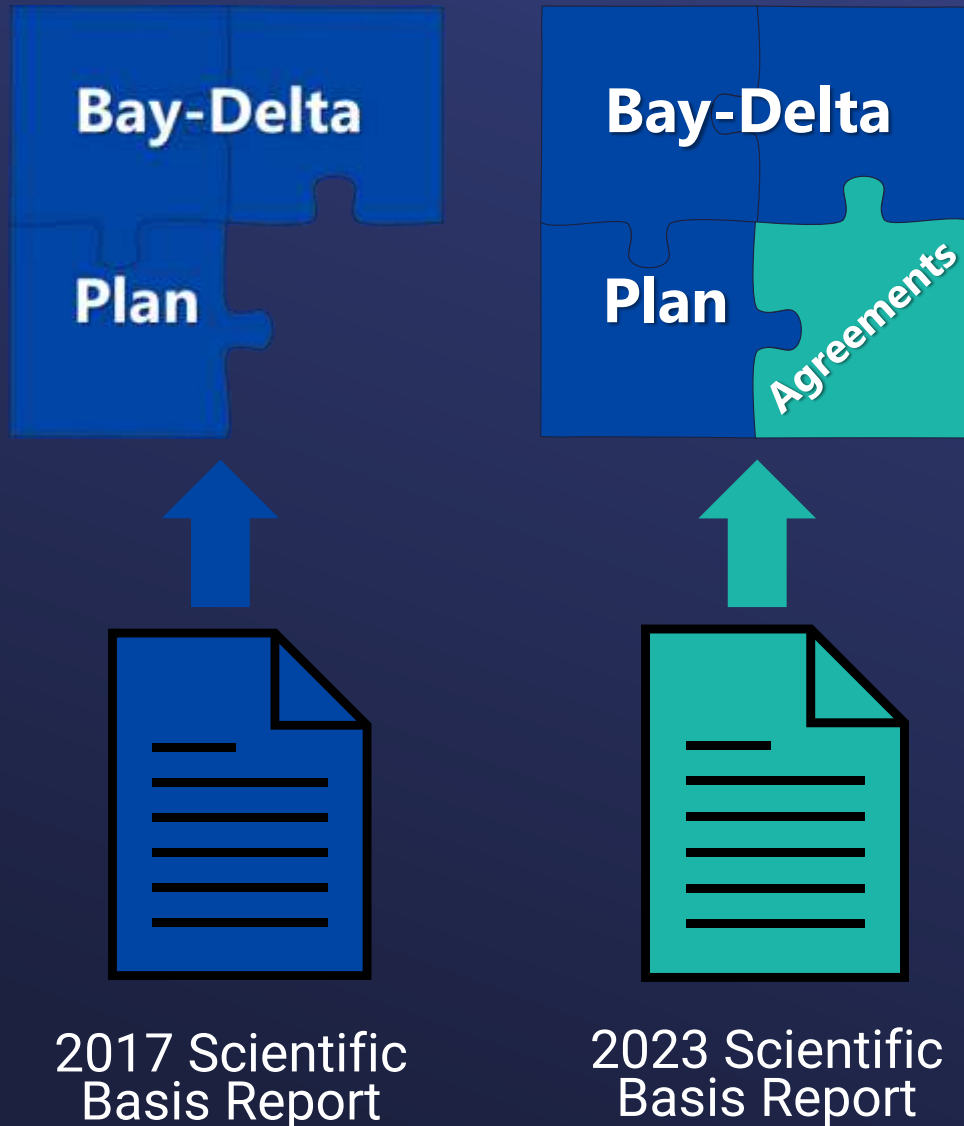
- Frequently Asked Questions
- MOU
- Recent Public Announcements
- State Water Board Draft Scientific Basis Report

<https://resources.ca.gov/Initiatives/Voluntary-Agreements-Page>

Agreement Timeline*



Draft Scientific Basis Report (2023)



- Increase tributary flows and Delta outflow
- Increase off-stream habitat
- Increase estuarine habitat area and species abundance

Report Evaluates Effects of Agreement

Spawning habitat



Bay-Delta habitat



Rearing habitat



Estuarine fish abundances



Spawning Habitat Targets Met

- All rivers meet target: American, Feather, Mokelumne, Sacramento, Yuba
- Mokelumne, Sacramento, and Yuba exceed target



Rearing Habitat Target in Some Rivers

- Mokelumne and Yuba meet target
- Adding off-stream habitat helps meet target
- Sacramento River: supplemented with 20,000 acres in bypasses
- Feather River: modifications to bypasses may increase habitat



Summary of median rearing habitat from Figure ES-2 in Draft Scientific Basis Report Supplement In Support of Proposed Voluntary Agreements For The Sacramento River, Delta, and Tributaries Update To The San Francisco Bay/Sacramento-San Joaquin Delta Water Quality Control Plan, January 2023

Bay-Delta Habitat Increases



- Spring habitat ↑ 2.1-5.8%
- Summer-Fall habitat ↑ 0.1-8.8%



- Spring-Summer habitat ↑ 3.4-5.0%



- Winter-Spring habitat ↑ 0-14.2%

Spring is defined as March-May; summer is defined as June-August; fall is defined as September-November; and winter is defined as December-February. Range in projected increases in habitat area within relevant seasons for each species from Table ES-3 in *Draft Scientific Basis Report Supplement In Support of Proposed Voluntary Agreements For The Sacramento River, Delta, and Tributaries Update To The San Francisco Bay/Sacramento-San Joaquin Delta Water Quality Control Plan*, January 2023

Estuarine Fish Abundance Increases

- Abundance increases in critical, dry, below normal and above normal water year types
- Multiple species benefit

Sacramento Splittail



2 to 10% ↑

Longfin Smelt



2 to 14% ↑

California Bay Shrimp



2 to 11% ↑

Stary Flounder



2 to 9% ↑

Conclusions and Next Steps

- Draft scientific basis report concluded that the agreements will contribute to:
 - Increased spawning and rearing habitat
 - Increased off-stream habitat
 - Increased estuarine habitat area and species abundance
- Future Steps:
 - Scientific basis report will inform State Board decision
- Near term steps:
 - Public and peer review through Q1 2024*
 - State team revising report based on comments received
 - State Board consideration for Adoption Q4 2024*





One Water & Stewardship Committee

Update on Household Water Use Study

Item 6c

April 10, 2023

Household Water Use Study



Background

- Devices included in residential leak detection rebate program (Flume is one accepted manufacturer)
- Self-installed on water meter to capture indoor and outdoor use
- Real-time water use and detection
- 14,587 total devices

Household Water Use Study

Study Methodology

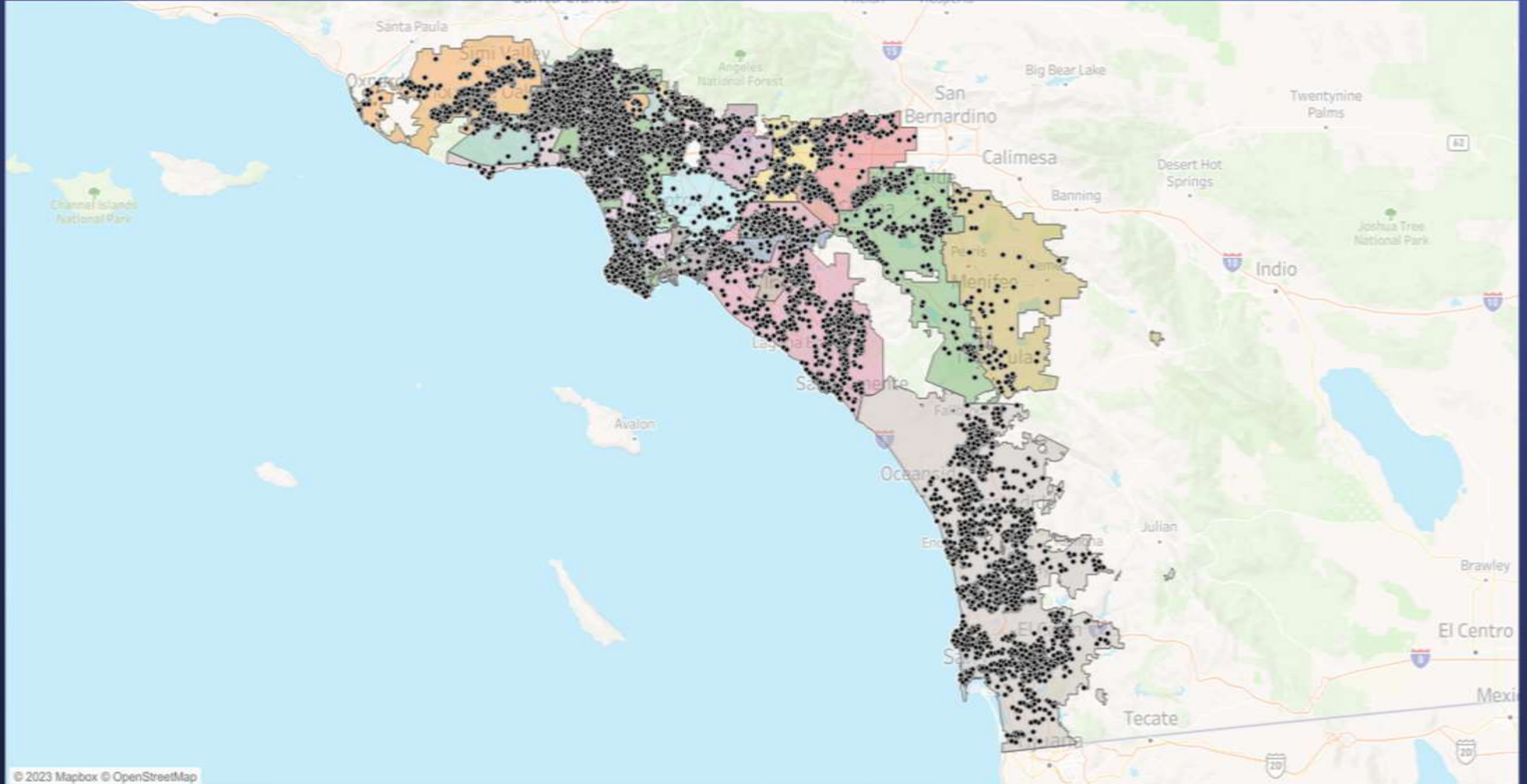
- Water use type determined by water signature
 - Smart technology continually learns use patterns
 - Breakdown of indoor and outdoor use
- Analyzed aggregate water use patterns for MWD service area

Household Water Use Study

Study Considerations

- Customers are self-selected
 - Greater awareness of water use
- Higher than average income
 - Indoor use similar to general population
 - Outdoor use higher than general population
- Household demographics are self-reported

Over 14,000 Devices Installed in MWD Service Area



Demographics

Number of Households **14,587**

Avg. Home Age **53 years**

Avg. Number of Residents **3.1**

Avg. Lot Size **17,776 Sq Ft**

Median Lot Size **8,030 Sq Ft**

Indoor and Outdoor Gallons per Household per Day

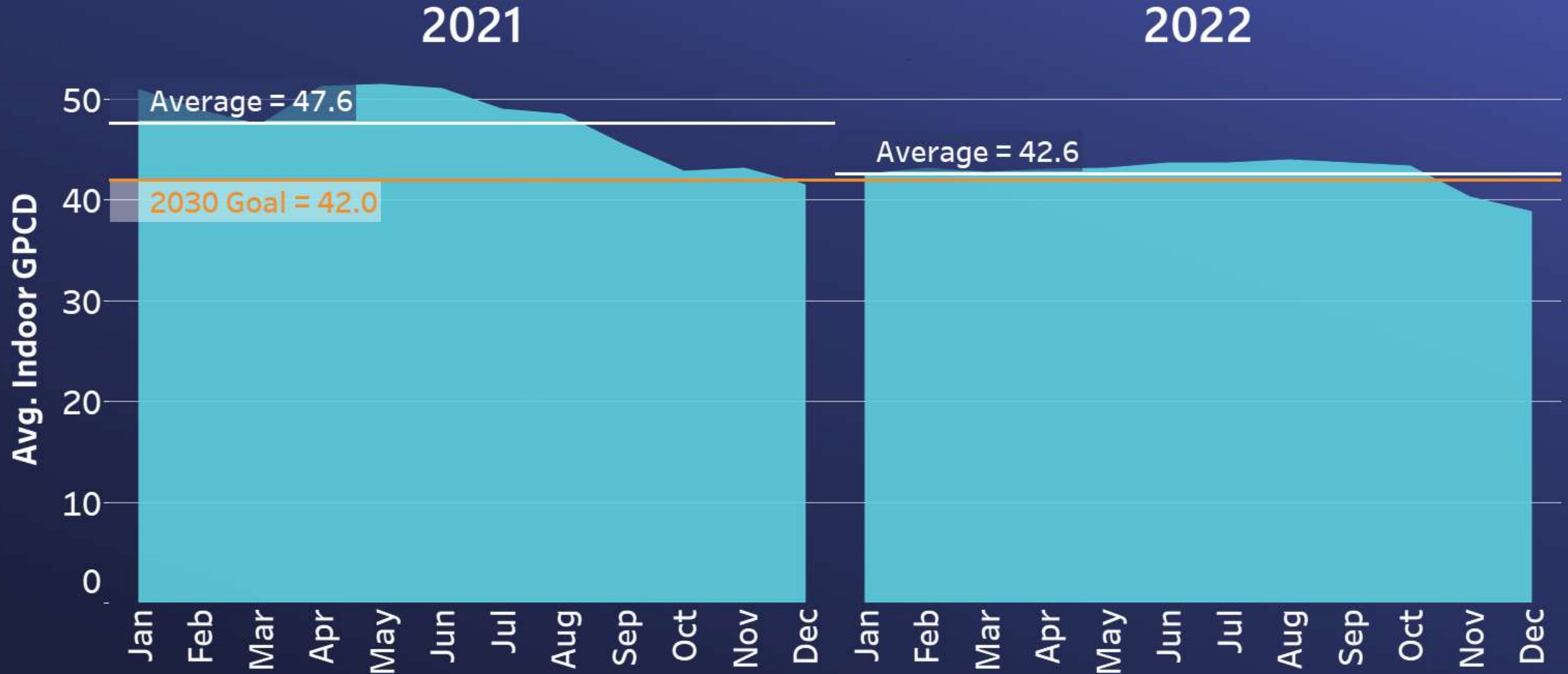


Outdoor Water Use Ranges from 50-80% of Total Water Use



Indoor Use Analysis (GPCD)

Indoor Use Trending Towards SB606/AB1668 Long-Term Conservation Framework 2030 Goal

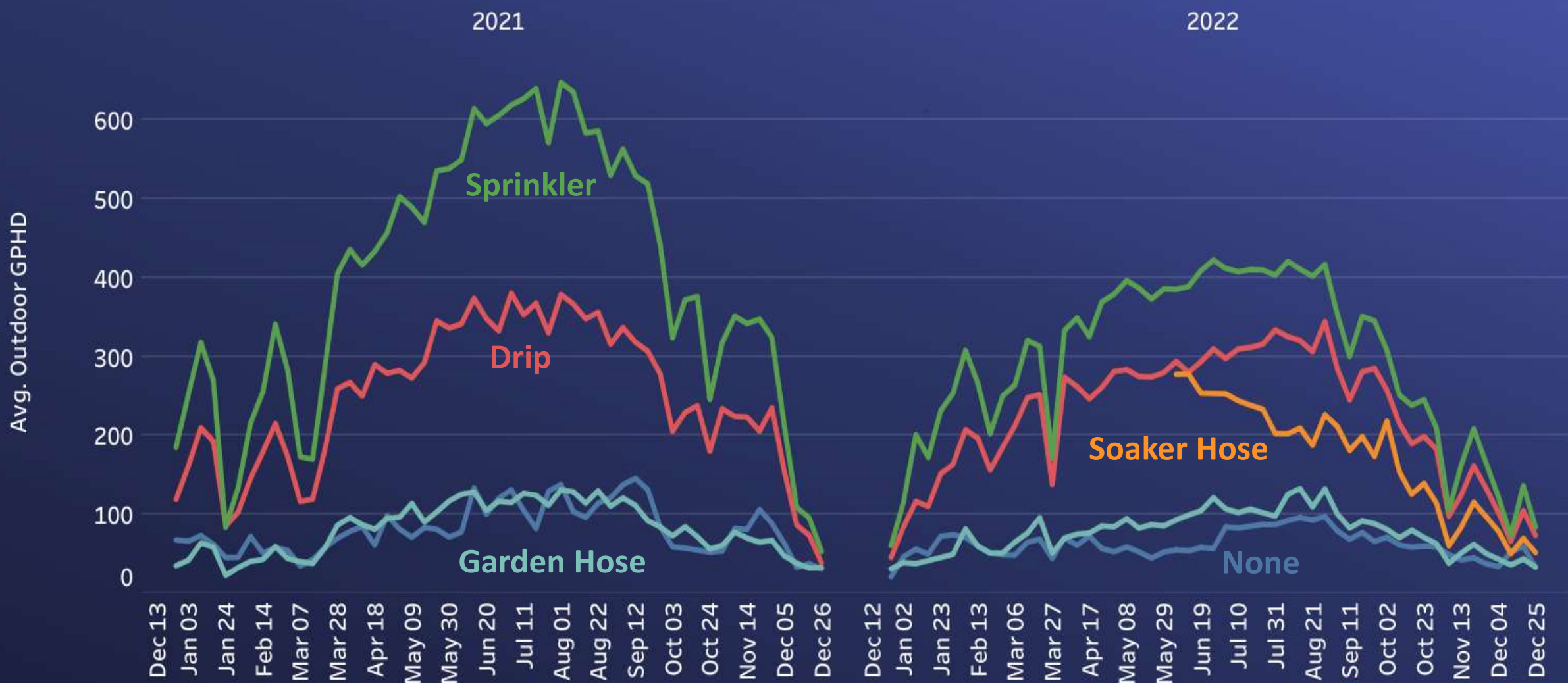


Indoor Water Use Breakdown

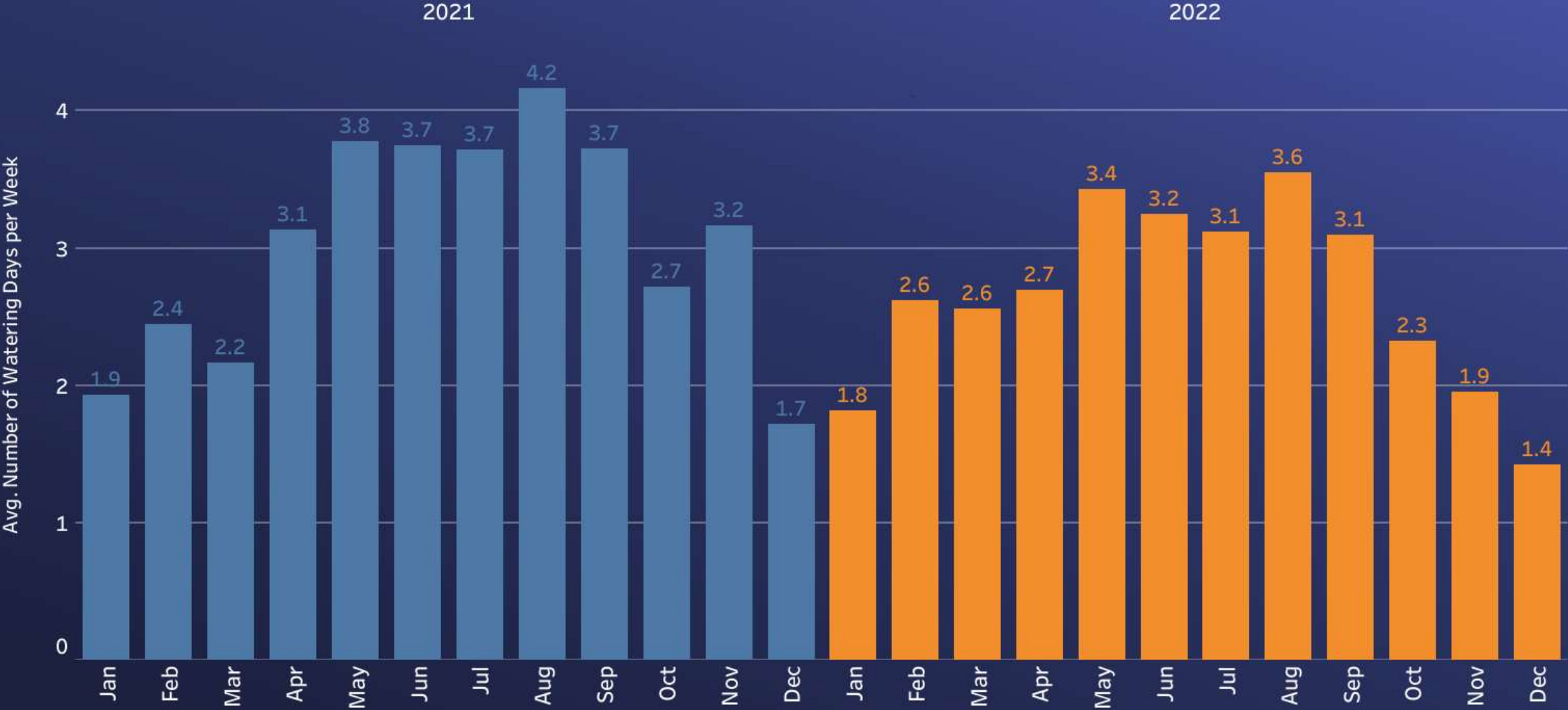


Outdoor Use Analysis (GPHD)

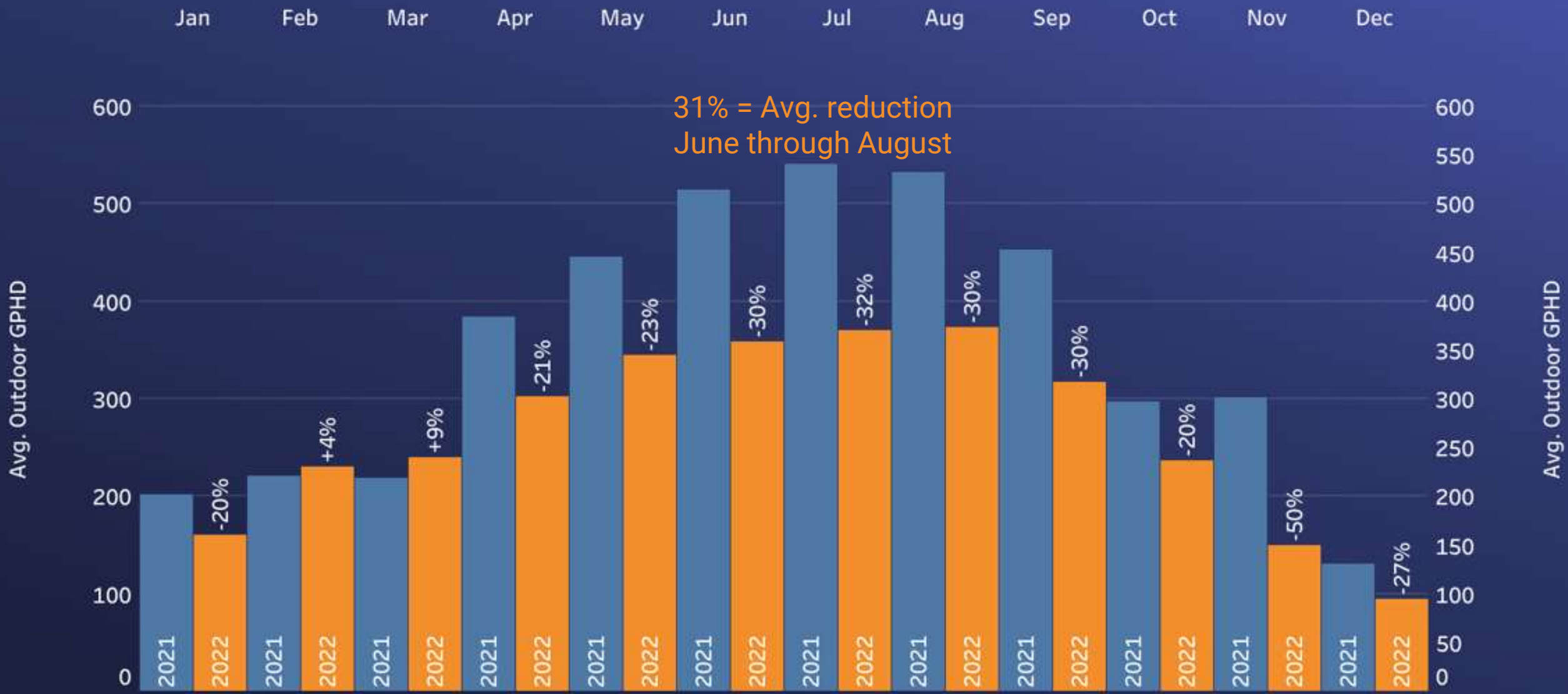
Large Variation in Water Use by Irrigation Type



Number of Irrigation Days Follows Seasonal Pattern



AVG Outdoor GPHD Decreased from 2021 to 2022



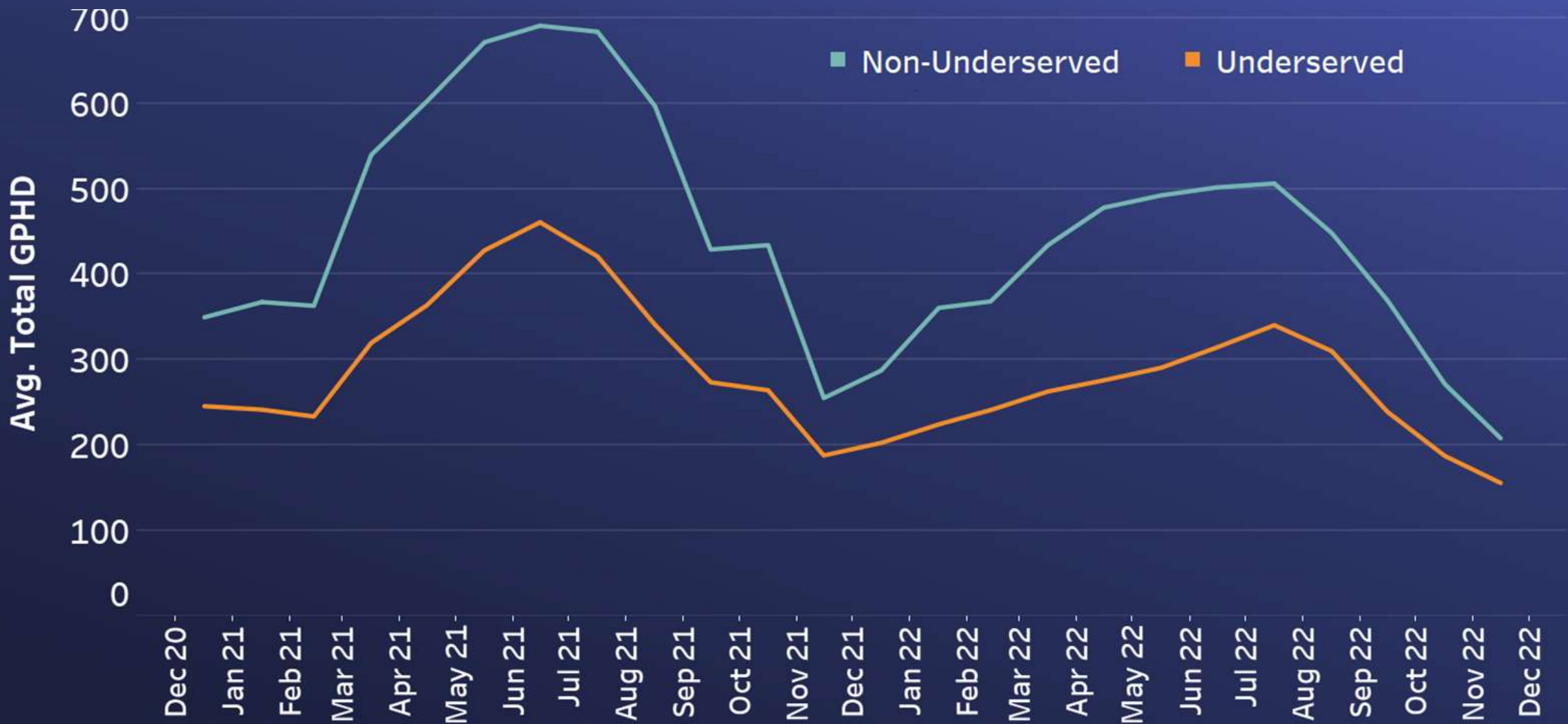
Outdoor household water use is declining compared to 2021 (limited data before 2021)



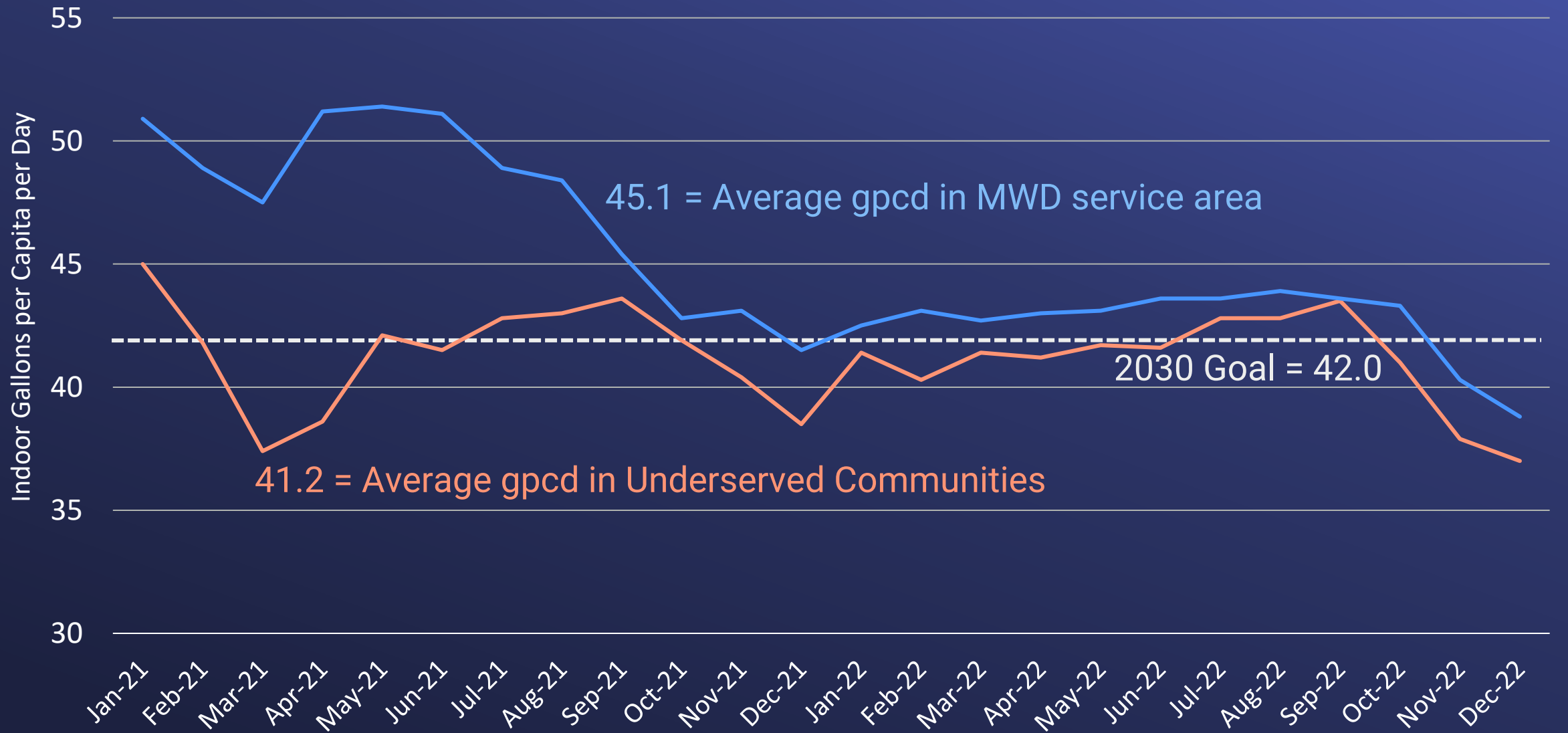
Emergency Water Conservation Program
Started in June 2022

Underserved Community Analysis

Total Use in Underserved Communities Significantly Lower



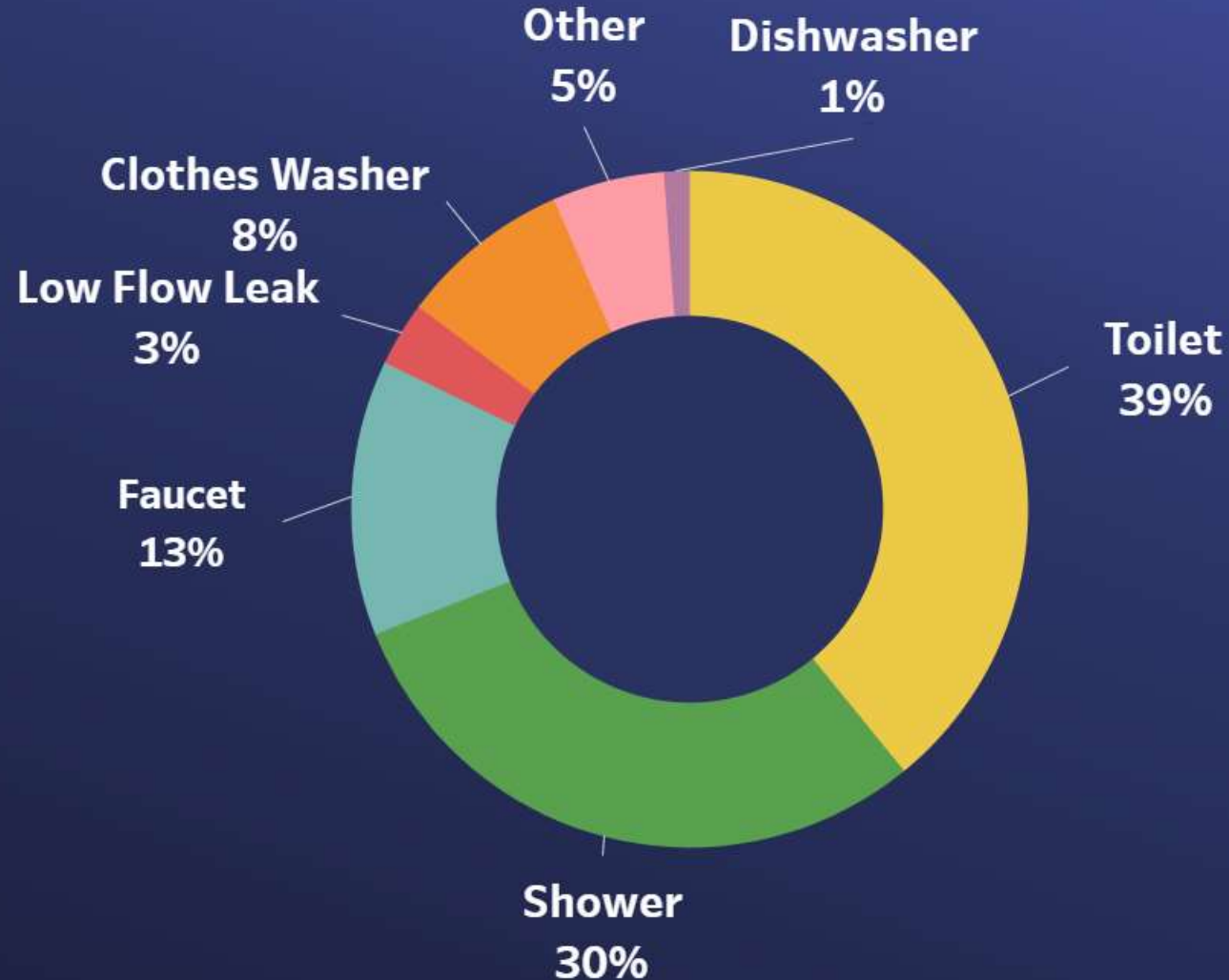
Indoor Use Below SB606/AB1668 Long-Term Conservation Framework 2030 Goal in Underserved Communities



Underserved Communities' Outdoor Water Use Ranges from 35-70% of Total Water Use

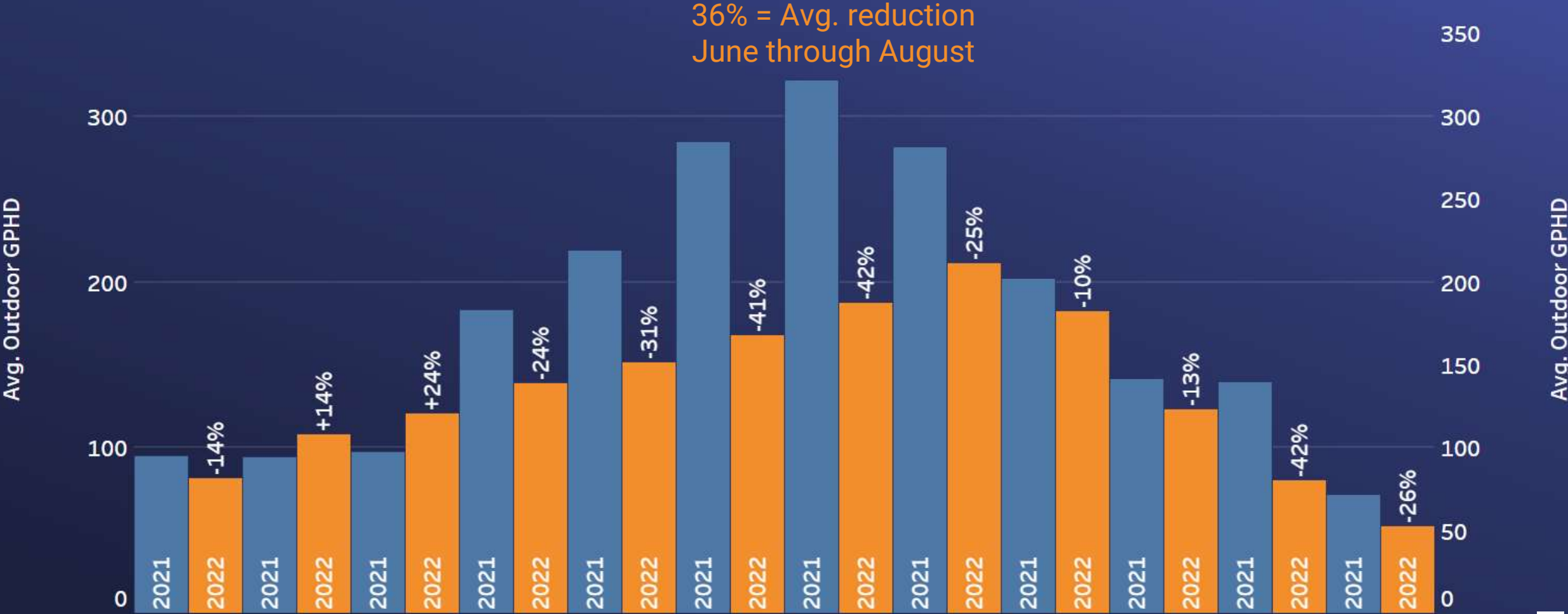


Indoor Use Breakdown Indicates Presence of Older Toilets in Underserved Communities

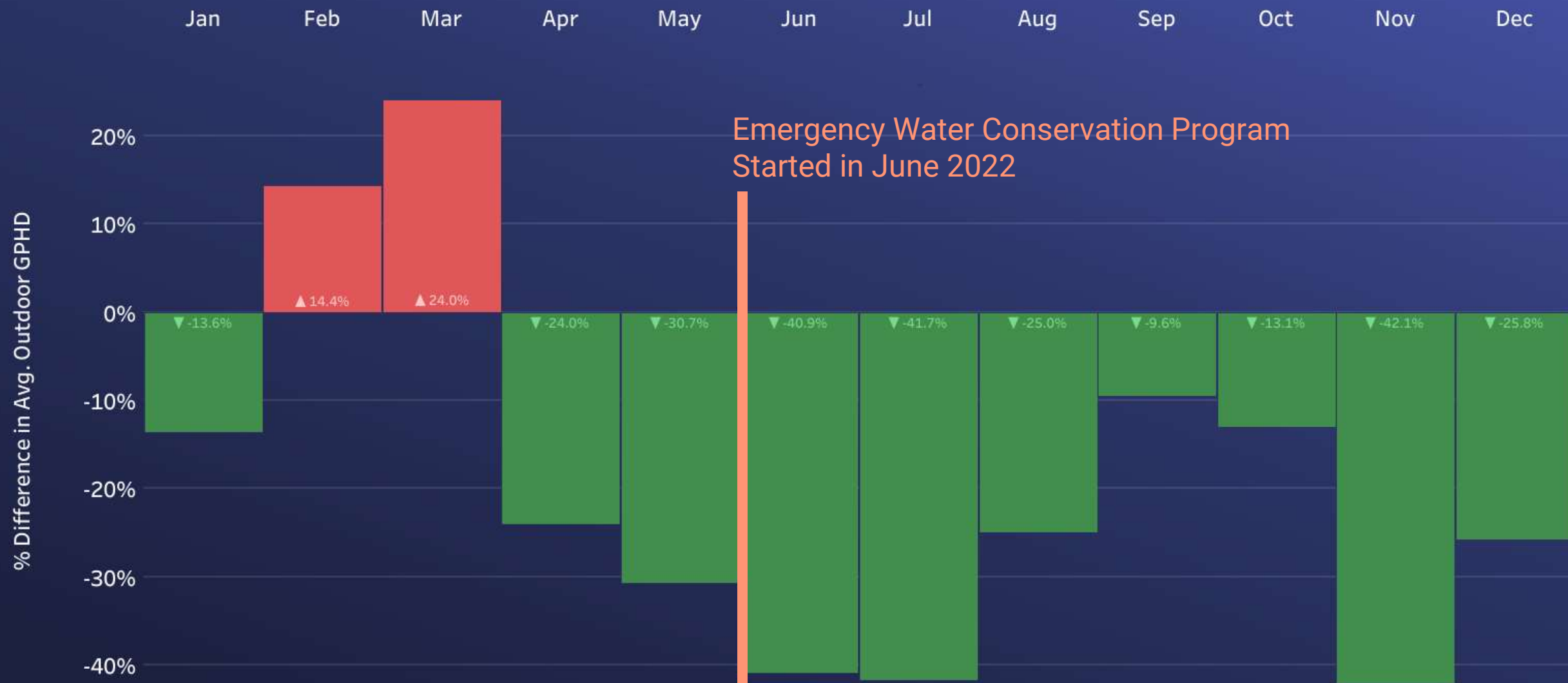


Underserved Communities Show Large Decrease in Outdoor Use During Drought

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



Lower Reduction in Overall Water Use in Underserved Communities



Household Water Use Study

Key Findings

- Indoor use is flat & trending toward 2030 long-term conservation framework goal
- Underserved Communities:
 - Indoor use already below 2030 framework goal
 - Greater reduction in outdoor use
 - Less water savings during drought
- Outdoor use dropped between 2021 and 2022
 - Effective drought messaging
 - SWP dependent area restrictions

Household Water Use Study

Potential Considerations for Program Development or Changes

- Continued indoor savings will become more difficult
- Targeting toilet programs may be most effective
- Focus on outdoor watering/landscape changes
- Messaging/tools to adjust outdoor watering days presents an opportunity

Household Water Use Study

Next Steps

- Study continues through end of 2023
- Board update in early 2024 with complete study analysis
 - MWD service area
 - Underserved community analysis
- Continued marketing of residential leak program to increase number of devices
 - Potential USBR grant application for underserved communities direct install program





One Water & Stewardship Committee

Update on Metropolitan's Activities on Non-Functional Turf

Item 6d

April 10, 2023

Non-Functional Turf (NFT) Efforts

Advancing Regional Non-functional Removal

- Incentives-based
 - Grants
- Sample ordinance / Board resolution
 - Passed in 2022
- New water allocation methodology for NFT in drought emergency
 - Data gathering underway
- State legislation
 - Part of 2023 legislative strategic plan

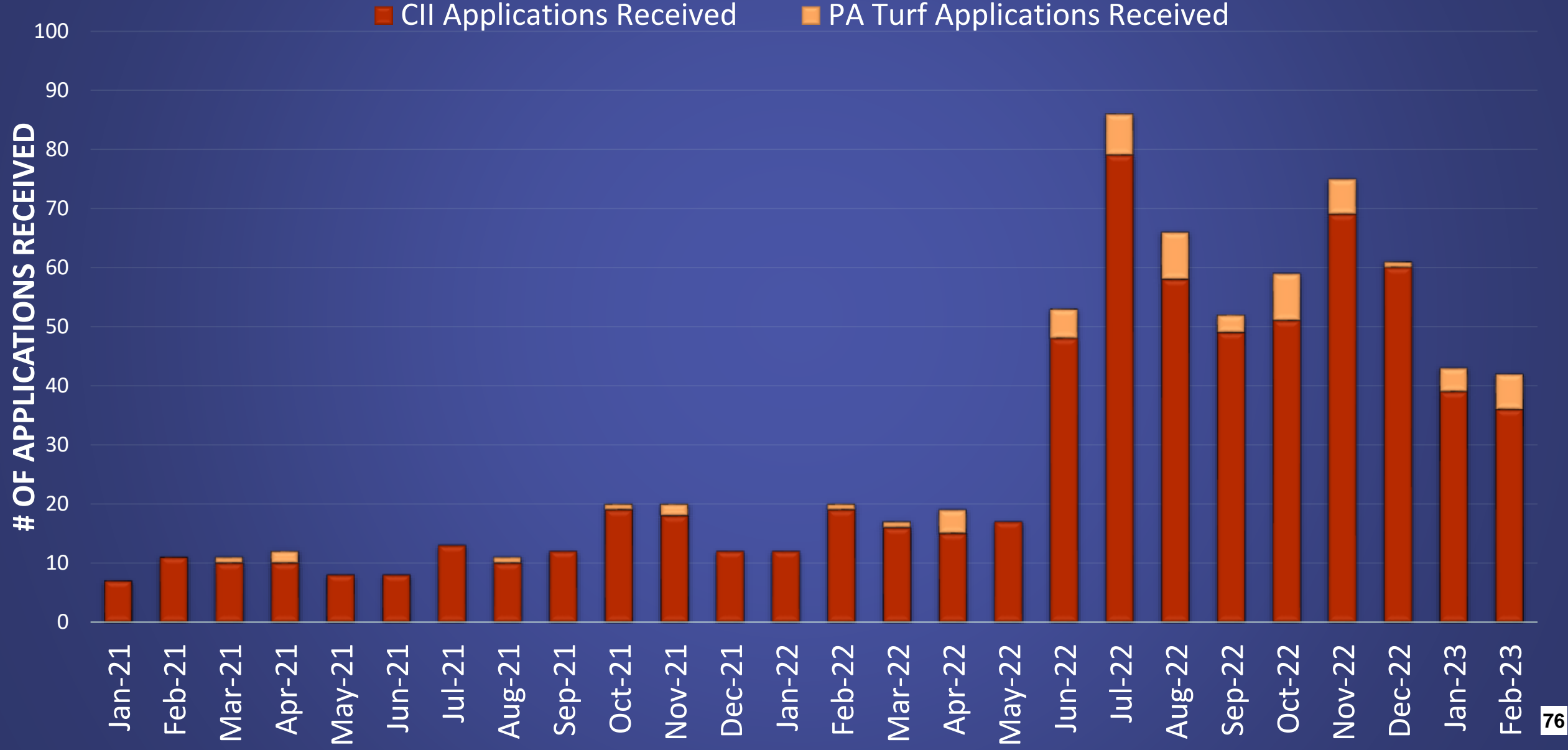
Non-functional Turf Removal Incentives

Turf Replacement Program Incentive Structure Change

Potential Increase in Turf Replacement Incentive

- \$4 million in grants received to increase incentive
 - CII - \$3 sq.ft.
 - Funding exhausted within 30 days
 - Public Agency - \$4 sq.ft.
- Continue to seek outside funding to achieve effort

CII and Public Agency Turf Replacement Applications Received (2021-2023)



Non-functional Turf Ordinance Development

Non-Functional Turf Ordinance Development

What Did Metropolitan do to Encourage Ordinance Adoption?

- Cities have water efficiency ordinances
 - Most have permanent ban section
- Metropolitan provided sample language to be added
- Metropolitan Board resolution encouraging adoption of ordinance language

Planetscape AI Turf Dashboard

Planetscape AI Turf Dashboard

Understanding Turf Prevalence in MWD Service Area

- Utilize turf dashboard development by Planetscape AI for future planning
 - How much turf is there?
 - Where is it located?
 - How much is really NFT?
- Second year agreement to refine dashboard and add retailer data

Approximately 9.5 Billion Square Feet of Established Turf within MWD service area

Land Cover Platform

This system provides an interactive series of tools for program officers to estimate the amount of land cover in a service area

Total Non-Functional Turf*

1.18B sqft

*includes industrial, commercial, utility, facilities and general office

Total Functional Turf*

8.3B sqft

*includes all other land uses except open space, vacant, agriculture, or protected land

New Users

Home

Water conservation remains the most cost-efficient means to reduce water consumption. In response this insights and analysis platform was created to provide a definitive baseline of non-functional turf in Metropolitan's service area, providing estimates by member agency and land use. These estimates allow program officers to test how different scenarios will meet the expected outcome and budget of a non-functional turf removal program.

The platform contains a series of interactive dashboards providing access to aerial imagery, land cover classifications and land uses. By selecting what land uses are non-functions (e.g commercial, industrial and utility), users can interactively query the amount of turf in those areas as well as what parcel groups contain the most turf.

Once those land uses are selected, the dashboard calculates the amount of turf in those areas as well as what parcel groups contain the most turf. These can be investigated on the center map or the results can be downloaded as a CSV.



What is the Dashboard?
How to use this application.

Agencies



Land Cover by Agency.

Metropolitan



Service-wide stats and analysis.

Information

Data|Decisions
IMPACT.

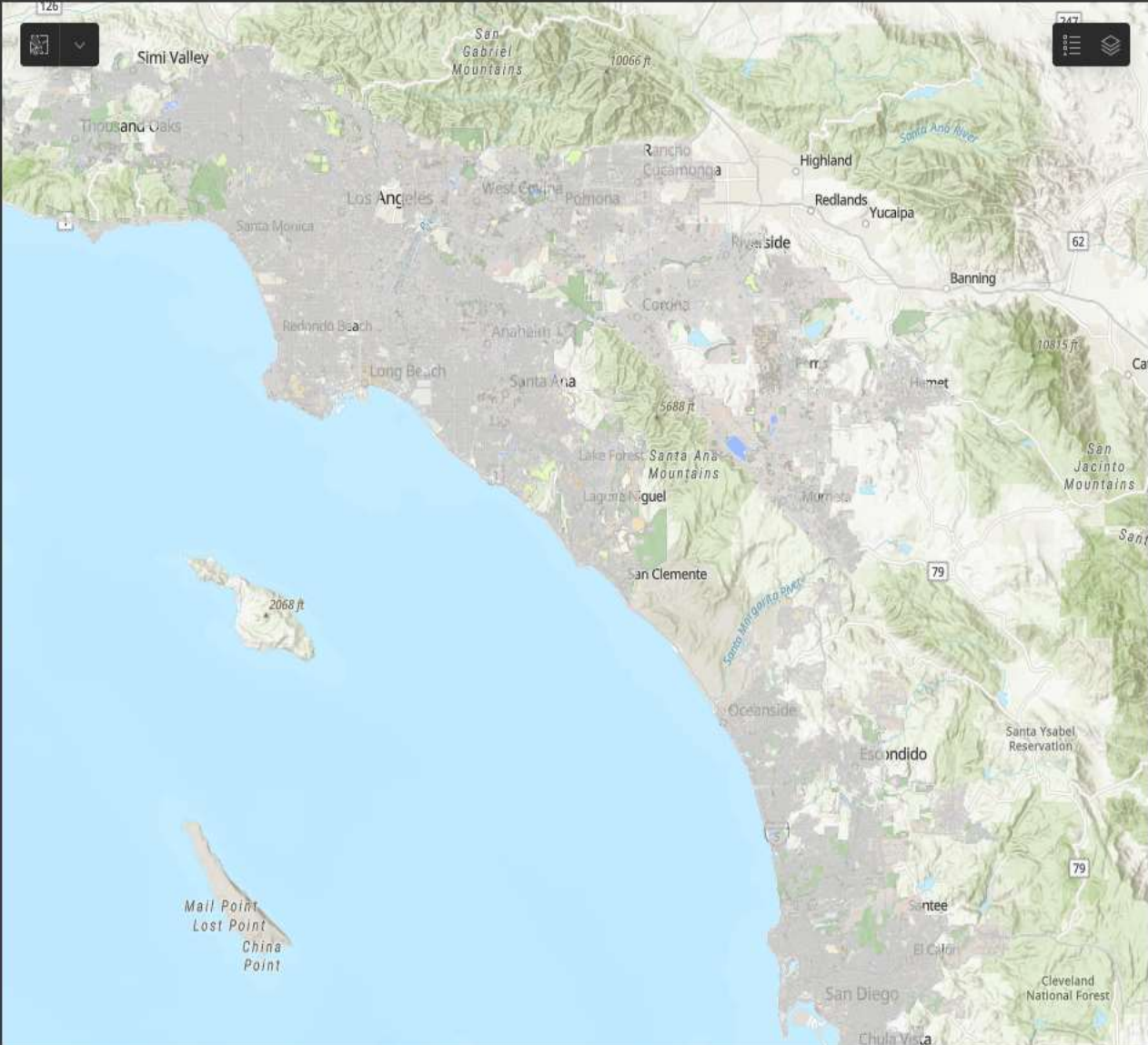
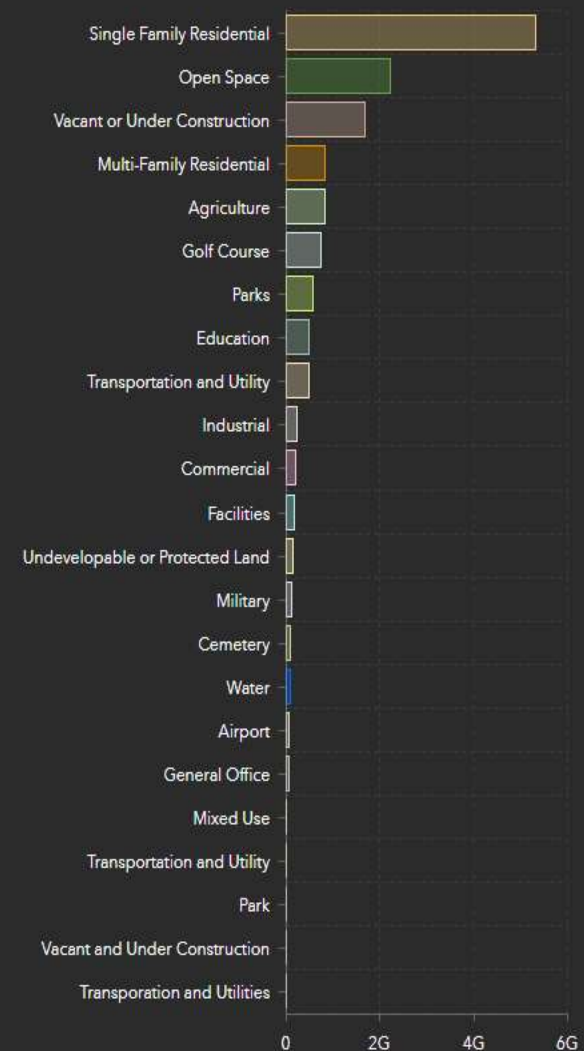
Learning what commercial service intelligence and quantitative data enables to inform and impact public sector industries and power markets.



Information on Sources and Methodology.

Output Tables Listed in Order of Highest Use

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

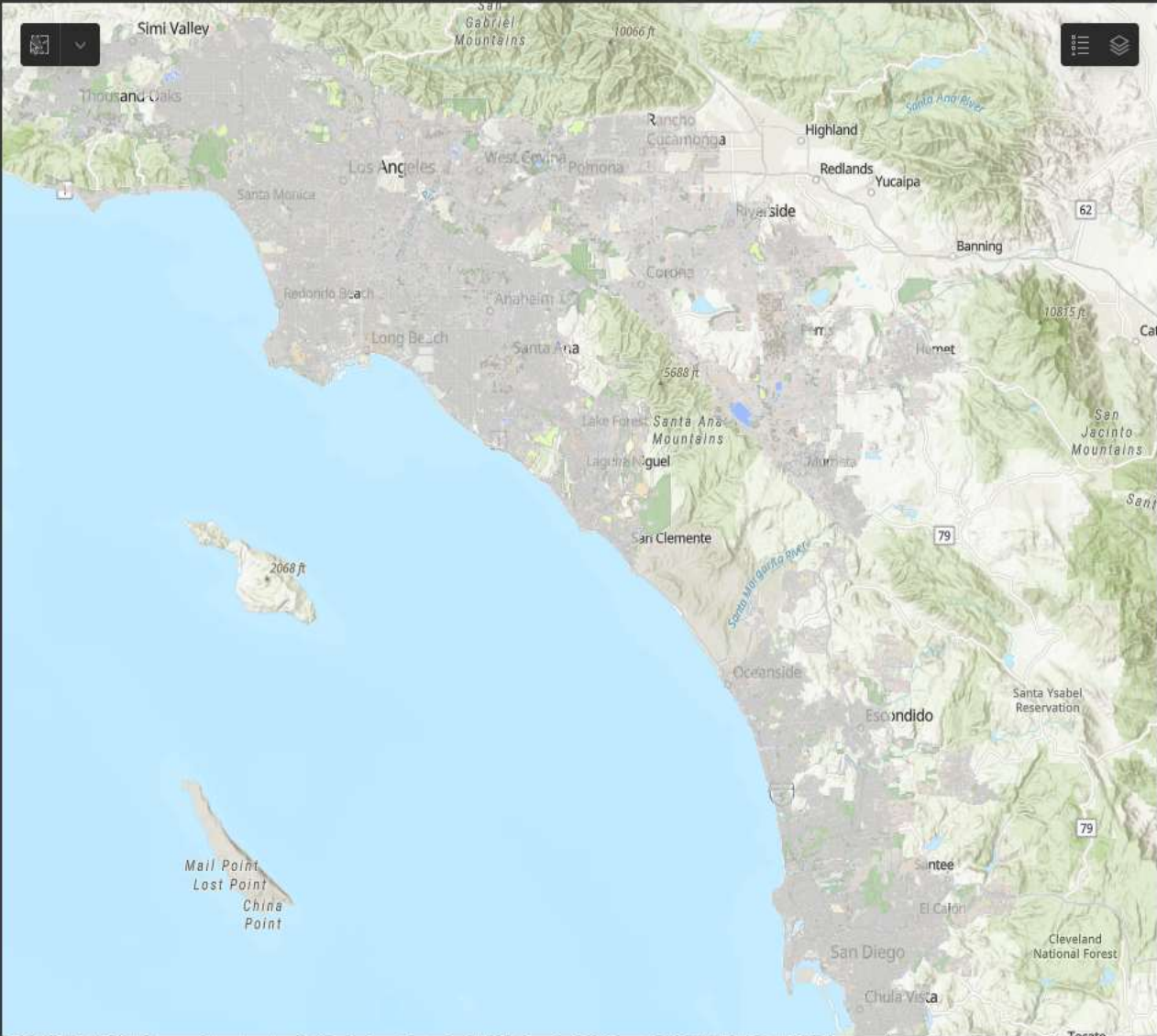
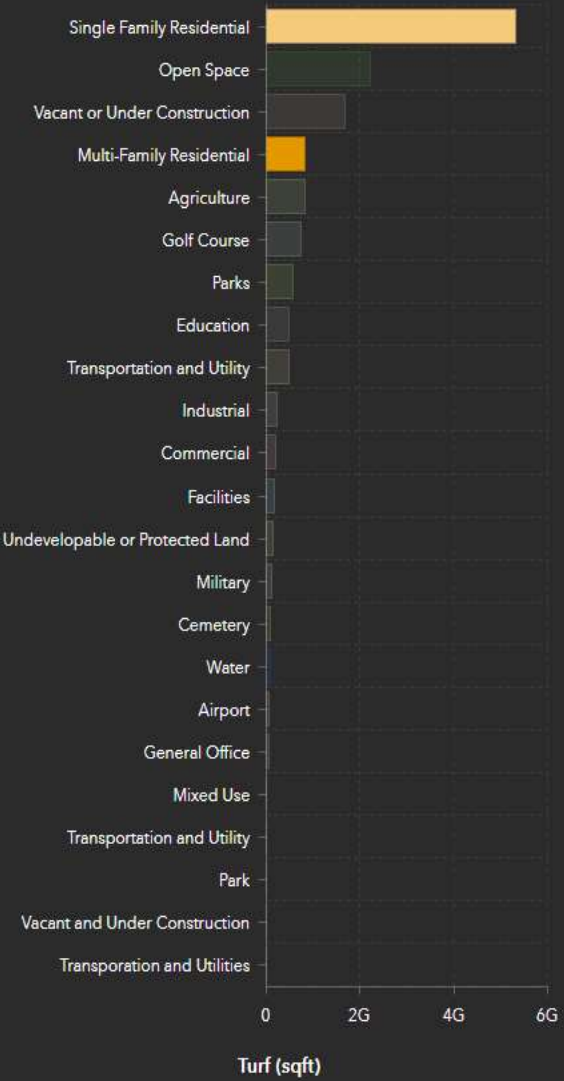
Open Space #250192:	119,731,873
MWDOC	
Open Space #454528:	106,460,857
Los Angeles	
Open Space #204687:	73,161,010
Inland_Empire	
Open Space #105611:	38,656,918
Calleguas	
Open Space #169220:	37,116,382
Eastern	
Vacant or Under Construction #216829:	30,938,996
Inland_Empire	
Single Family Residential #269069:	24,123,306
MWDOC	

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	5,325,956,681
Open Space	2,207,636,385
Vacant or Under Construction	1,667,992,205
Multi-Family Residential	823,057,521
Agriculture	811,175,130
Golf Course	726,501,107
Parks	14,316,701,007
Education	14,316,701,007
Transportation and Utility	14,316,701,007
Industrial	14,316,701,007
Commercial	14,316,701,007
Facilities	14,316,701,007
Undevelopable or Protected Land	14,316,701,007
Military	14,316,701,007
Cemetery	14,316,701,007
Water	14,316,701,007
Airport	14,316,701,007
General Office	14,316,701,007
Mixed Use	14,316,701,007
Transportation and Utility	14,316,701,007
Park	14,316,701,007
Vacant and Under Construction	14,316,701,007
Transportation and Utilities	14,316,701,007
Total	14,316,701,007

Over Half of Established Turf is on Residential Property

Step 1: Select Land Uses



Esri, CGIAR, USGS | County of Los Angeles, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management... Powered by Esri

Overview Map legend Turf By Parcel Group

Step 2: Explore by Parcel Group

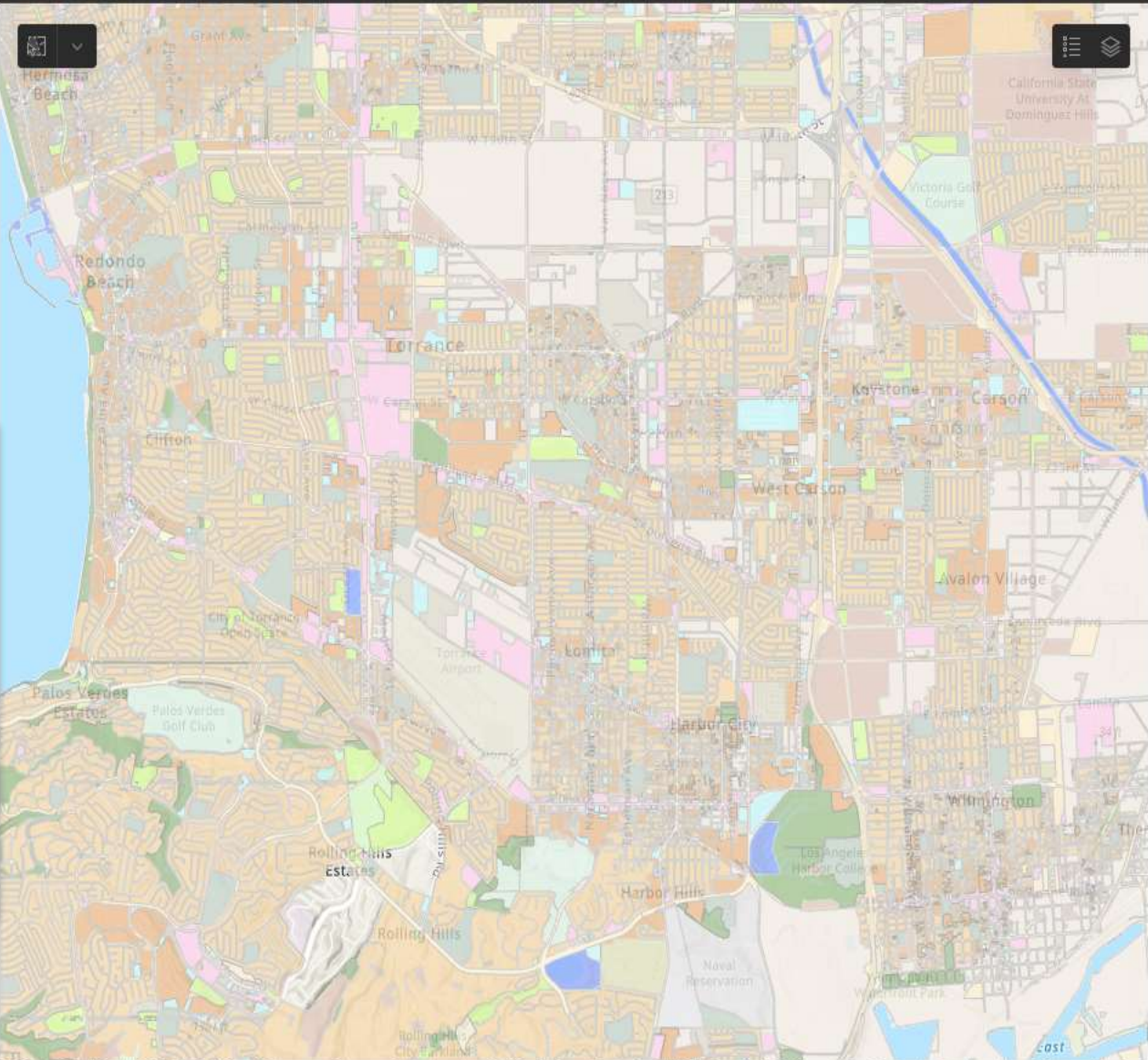
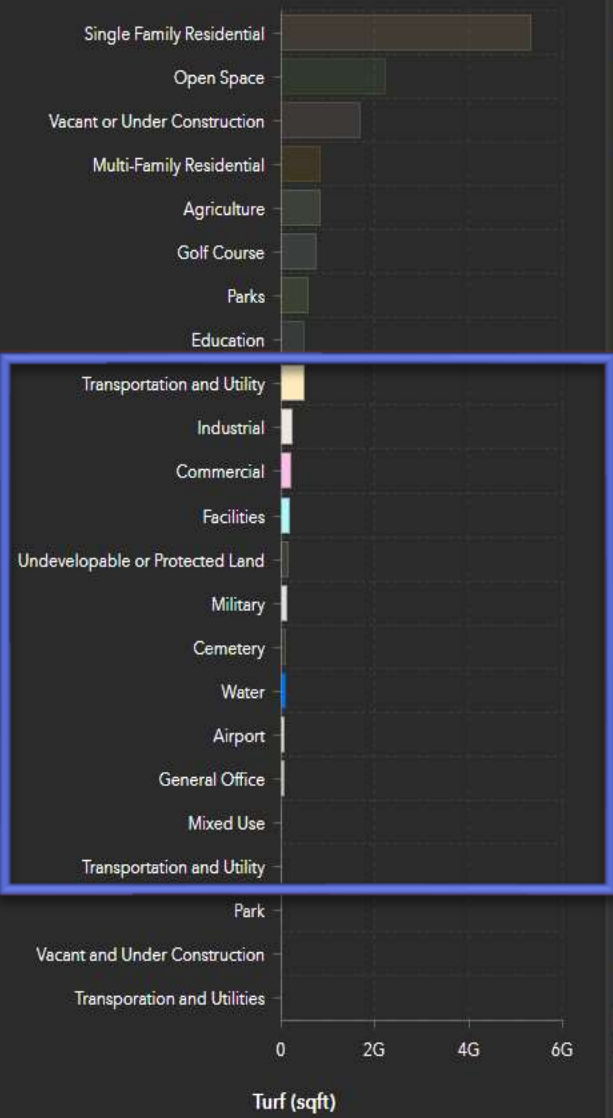
- Single Family Residential #269069: 24,123,306 MWDOC
- Single Family Residential #56102: 20,787,161 SDCWA
- Single Family Residential #253456: 14,680,166 MWDOC
- Single Family Residential #267514: 12,613,166 MWDOC
- Single Family Residential #295681: 12,124,626 Three_Valleys
- Single Family Residential #64287: 10,828,372 SDCWA
- Single Family Residential #267655: 10,005,397 MWDOC

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	5,325,956,681
Multi-Family Residential	823,057,521
Total	6,149,014,202

Category Selection Allows for Customized NFT Calculations

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

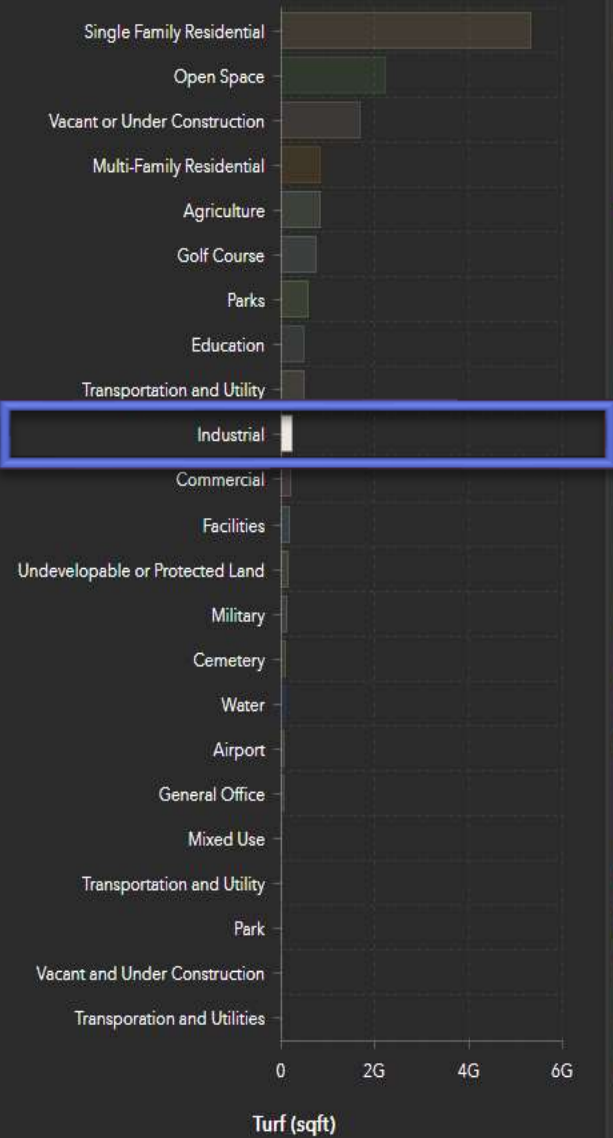
Military #13737:	21,809,147
SDCWA	
Airport #352956:	12,359,507
Western	
Military #242456:	11,160,857
MWDOC	
Military #242450:	10,522,406
MWDOC	
Airport #352960:	7,787,947
Western	
Military #242459:	7,787,822
MWDOC	
Airport #234820:	7,682,137
MWDOC	

Step 3: Output Table

Land Use	Turf (sqft)
Transportation and Utility	480,328,467
Industrial	238,124,812
Commercial	209,506,157
Facilities	180,594,546
Military	105,201,828
Water	86,343,649
Total	1,456,684,383

Parcel Groups Listed by Turf Square Footage

Step 1: Select Land Uses



Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, City of West Covina, County of Los Angeles, California State Parks, © OpenStreetM... Powered by Esri

Overview Map legend Turf By Parcel Group

Step 2: Explore by Parcel Group

Industrial #322807: 4,733,728
Upper_San_Gabriel

Industrial #330001: 1,764,274
West_Basin

Industrial #97488: 1,428,845
Calleguas

Industrial #356639: 1,366,750
Western

Industrial #13326: 1,288,166
SDCWA

Industrial #416017: 1,139,733
Los Angeles

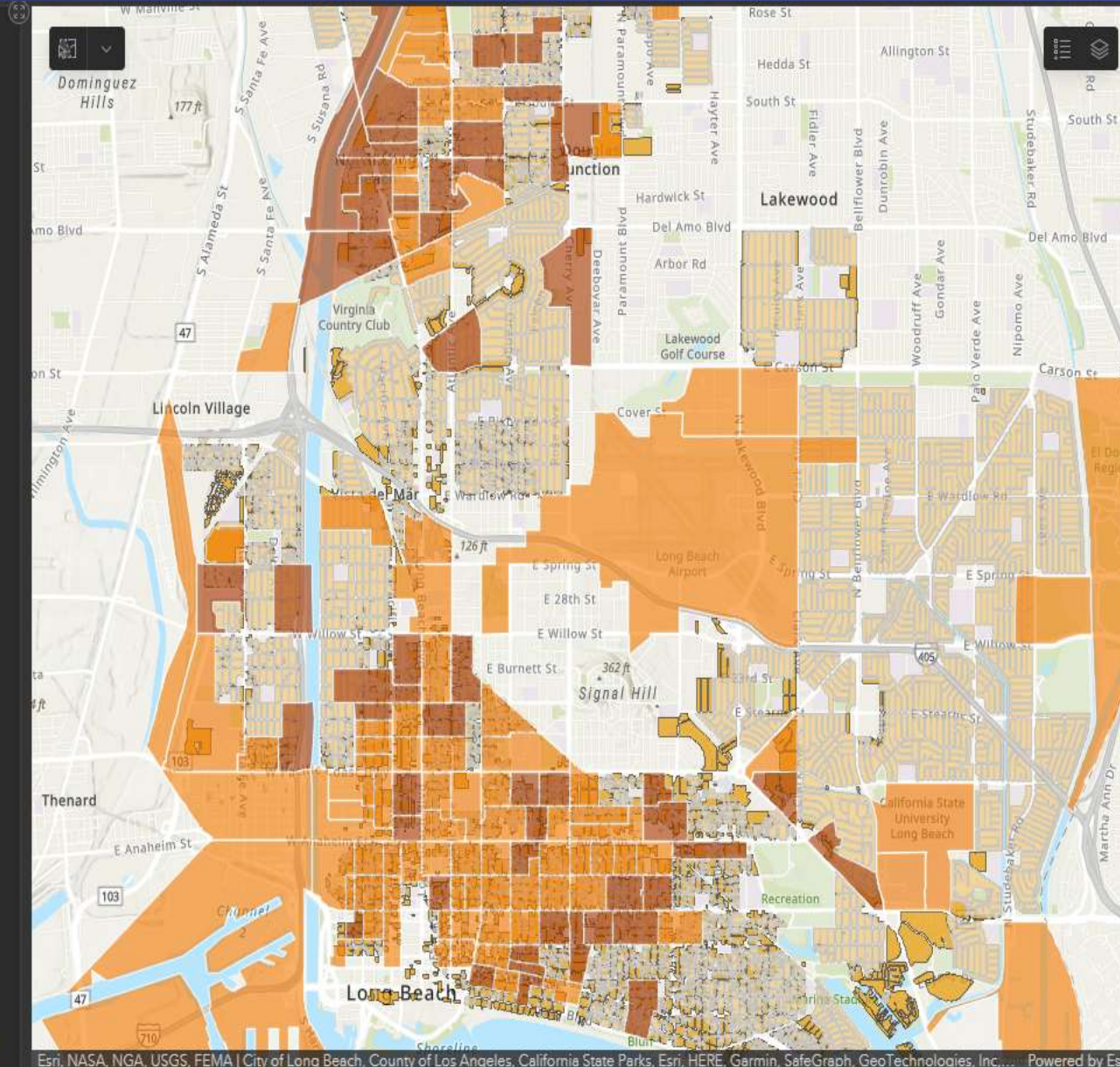
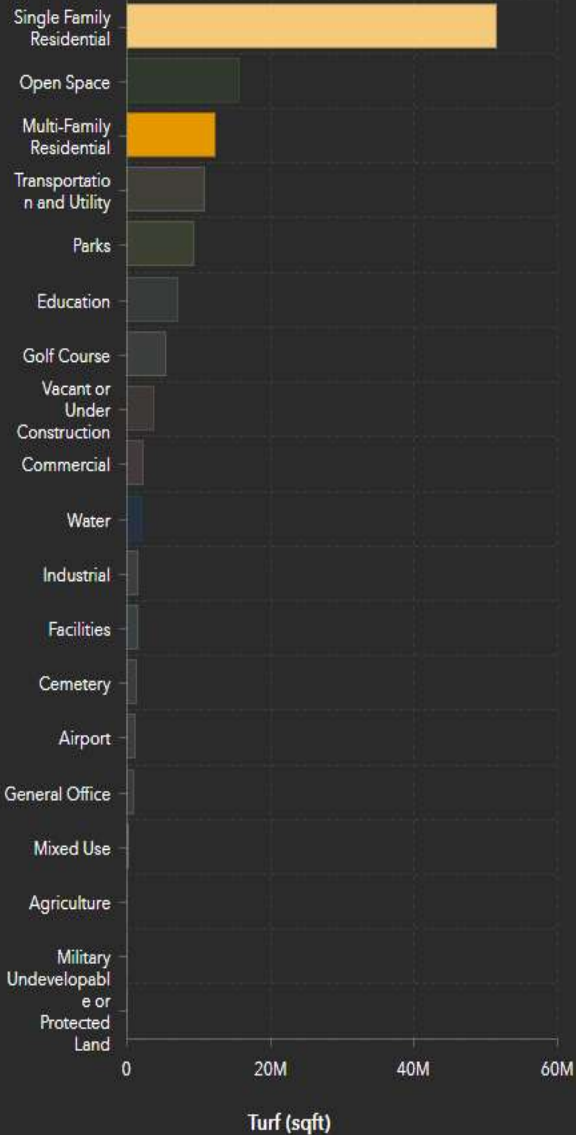
Industrial #356805: 1,098,409
Western

Step 3: Output Table

Land Use	Turf (sqft)
Industrial	4,733,728
Total	4,733,728

Underserved Community Overlay Available

Step 1: Select Land Uses



Step 2: Explore by Parcel Group

Single Family Residential #12175: **316,851**

Multi-Family Residential #3831: 209,686

Single Family Residential #13174: 205,623

Multi-Family Residential #6575: 178,044

Single Family Residential #13175: 169,693

Single Family Residential #12185: **162,915**

Single Family Residential #12752: 161,773

Multi-Family Residential #5922: 157,260

Multi-Family Residential #5191: 152,224

Single Family Residential #12203: 101,893

Single Family Residential #10351: **99,617**

Step 3: Output Table

Land Use	Turf (sqft)
Single Family Residential	51,415,392
Multi-Family Residential	12,280,605
Total	63,695,997

Legislation to Ban Watering of Non-Functional Turf

Non- Functional Turf Legislation

AB 1572

- Introduced by Assembly Member Friedman
- Bans the use of potable water for the irrigation of NFT on CII properties
 - Requires SWRCB to develop compliance and certification procedures
 - Requires annual compliance audits for two hydrologic regions
- NFT is defined as turf not designated by a property owner or government agency for recreational use or public assembly

Next Steps

- Continue to seek outside funding for turf replacement incentives
- Continue to promote draft ordinance language to member agencies and retailers
- Continue work with Planetscape AI to refine turf dashboard
- Discuss possible support of AB 1572 with Board and member agency staff





● **Water Surplus and Drought Management Update** *Conditions as of 3/16/2023*

Summary

This report provides an accounting for water supply, demand, and storage conditions for calendar year (CY) 2023 as of March 16, 2023. This report also tracks the hydrologic conditions for water year (WY) 2022-2023. Updated supply and hydrologic information will be provided during the oral report in April.

On February 22, 2023, the California Department of Water Resources (DWR) increased the State Water Project (SWP) allocation to 35 percent. In addition, Metropolitan has entered into an unbalanced exchange agreement with the Santa Clarita Valley Water Agency, another SWP Contractor, to help manage their SWP supplies. Including the exchange, Metropolitan's SWP supply to manage is 673 TAF as of the date of this report.

Metropolitan's Colorado River supply is currently estimated to be 909 TAF. This reflects the United States Bureau of Reclamation's (USBR) daily forecast of water use for California's Colorado River water users for this year. Water usage by the higher priority water users impacts Metropolitan's supply. Metropolitan's combined SWP and Colorado River supplies are estimated to be 1.58 million acre-feet (MAF) for CY 2023 at the current allocation.

The CY 2023 current trend demand on Metropolitan is estimated to be 1.41 MAF. This is a 105 TAF decrease from last month's estimate. The reduction in the current trend demand reflects the ongoing conservation efforts and the improving local supply conditions from the substantial precipitation received in Metropolitan's service area and member agencies' watersheds. Since supply exceeds demand by 169 TAF, Metropolitan will put water into storage to replenish storage and help protect the region against future dry years. Put capacity for each storage program is presented in **Attachment 1**.

Because there is no longer an acute water shortage for the SWP Dependent Area, Metropolitan's board rescinded the Water Shortage Emergency Condition for the SWP Dependent Area and terminated the Emergency Water Conservation Program on March 14, 2023. But despite the short-term improvement in supply from the SWP and the Colorado River, the Colorado River reservoirs will recover somewhat but the watershed remains in a 23-year drought. On-going negotiations with the Basin States and potential changes to the 2007 Interim Guidelines initiated by USBR introduce uncertainty in future supplies. Future SWP supplies are also uncertain and can quickly return to dry conditions. For these reasons, the Water Supply Alert declared by the Board in August 2021 is still in effect for all member agencies. Metropolitan continues to call on residents and businesses across the region to continue to use water as efficiently as possible to help refill storage and better prepare for the uncertainties on our imported water supply.

Purpose

Informational

Attachments

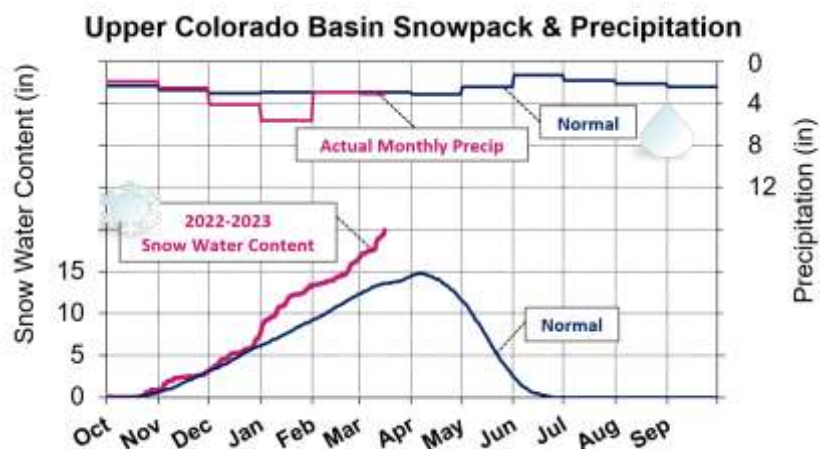
Attachment 1: Projected 2023 WSDM Storage Detail (35 percent SWP Table A allocation)

Attachment 2: Future Contributions and Obligations and Cyclic Program

Attachment 3: Future Supply and Demand Gaps

Detailed Report

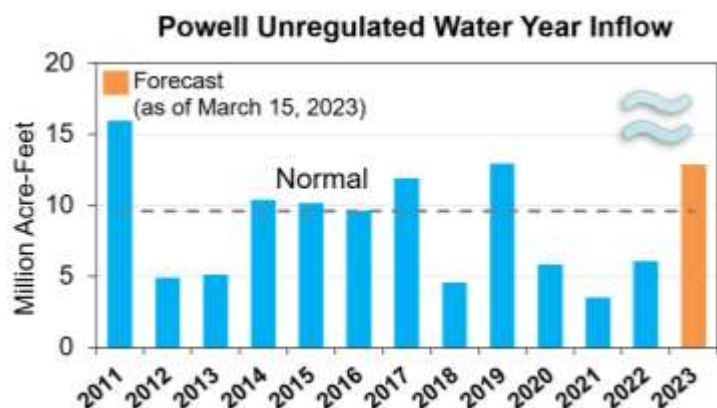
This Water Surplus and Drought Management (WSDM) report provides the water supply and demand estimates for CY 2023 and hydrologic conditions for WY 2022-2023.



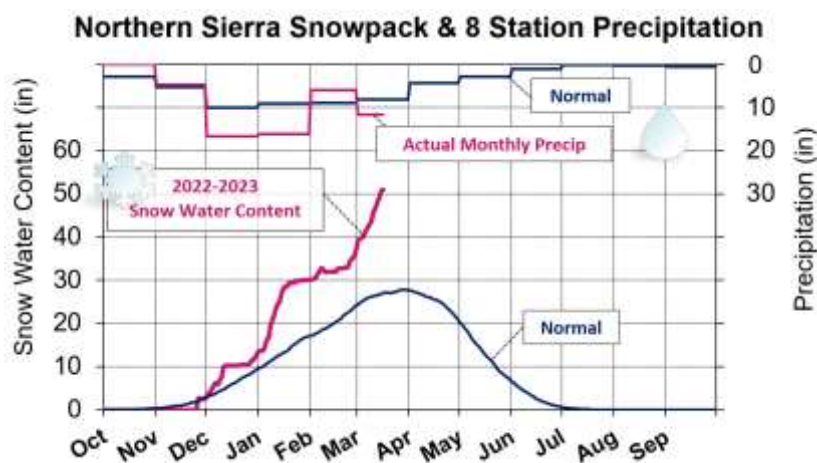
Upper Colorado River Basin

- * Above normal snowpack water content for this date (19.9 inches or 146% of normal for this date).

Snowpack well above the April 1 normal (137% of April 1 normal).



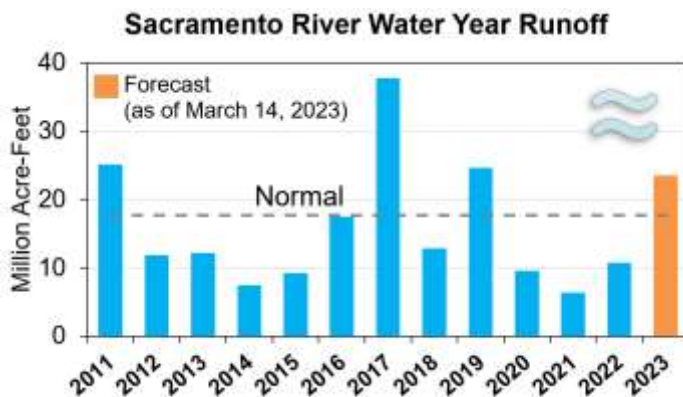
- ◆ Above normal precipitation to date (20.19 inches or 131% of normal for this date).
- ≈ Runoff into Lake Powell for WY 2023 is forecasted at 134% of normal.



Sacramento River Basin

- * Above normal snowpack water content for this date (50.9 inches or 178% of normal for this date).

Snowpack well above the April 1 normal (174% of April 1 normal).



- ◆ Above normal precipitation to date (55.2 inches or 137% of normal for this date).

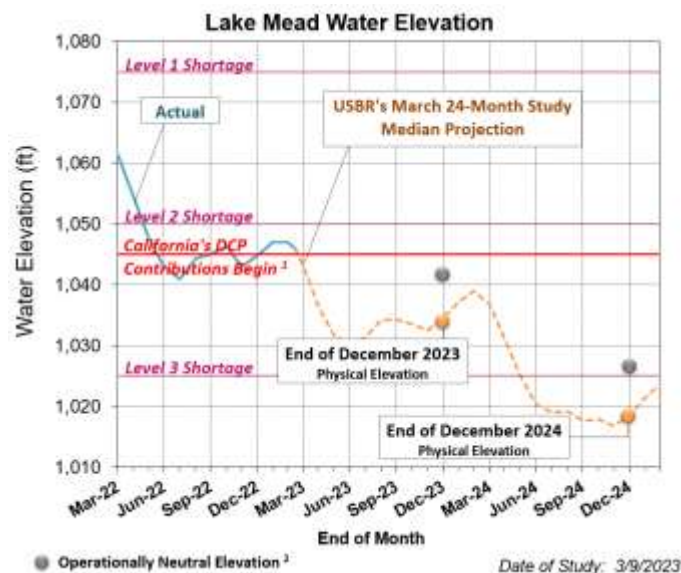
Precipitation to date has surpassed the water year average (104% of the water year average).

- ≈ Runoff into the Sacramento River for WY 2023 is forecasted at 133% of normal.

CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
CVWD - 2nd Amendment, Exchange of Additional Water	13,000
PVID Fallowing Program	38,000
Exchange w/ SDCWA (IID/Canal Lining)	278,000
Exchange w/ USBR (San Luis Rey Tribe)	16,000
Lower Colorado Water Supply Project	9,000
Bard Seasonal Fallowing Program	6,000
Quechan Diversion Forbearance	0
Quechan Seasonal Fallowing Program	0
Higher Priority Water Use Adjustment	-105,000
Total CRA Supplies ^{1,2}	909,000

¹ Per USBR Forecast (3/13/23).

² Total may not sum due to rounding.



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

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

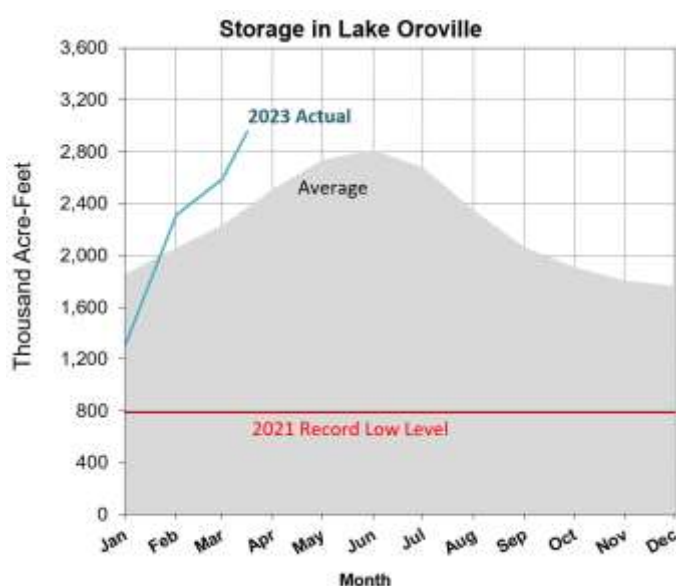
- Lake Mead storage is currently 7.39 MAF or elevation 1,045.9 feet (28 percent of total capacity).
- The Lower Basin is at a Level 2a shortage in CY 2023. Under this level, Metropolitan is not impacted.
- However, due to the critical conditions on the Colorado River, USBR initiated a fast-track process to modify the 2007 Interim Guidelines for operations in 2023, 2024, and possibly through 2026. USBR plans to issue a draft Supplemental Environmental Impact Statement (SEIS) for public comment in the Spring and a final SEIS and Record of Decision in Summer 2023.
- Metropolitan may use ICS to meet future DCP contributions.

SWP Supplies	Acre-Feet
Table A (35% SWP allocation)	669,000
Port Hueneme ¹	1,000
Unbalanced Exchange ²	3,000
Total SWP Supplies ³	673,000
Total Supplies (CRA + SWP)	1,582,000
(Prior to storage actions)	

¹ Rounded to the nearest thousand.

² Unbalanced exchange with the Santa Clarita Valley Water Agency.

³ Total may not sum due to rounding.



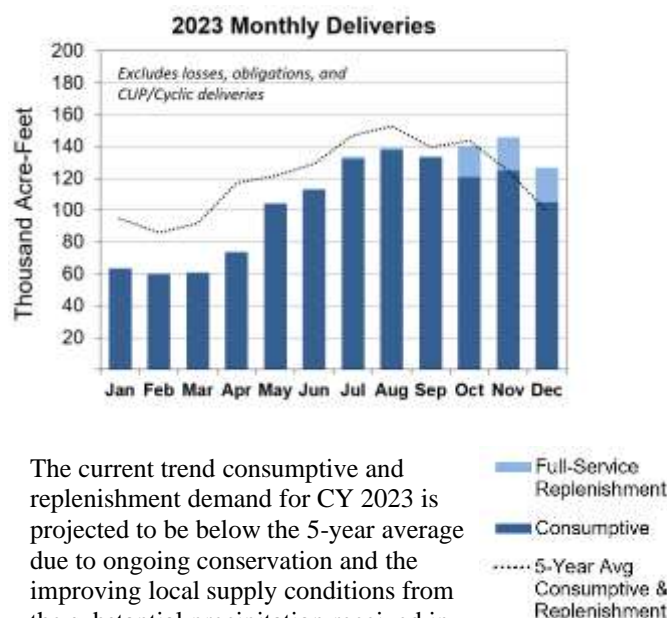
- Additional increases to the SWP Table A allocation are expected as DWR's subsequent allocation studies continue to incorporate forecasted runoff from the developing snowpack.
- Lake Oroville is currently at 2.95 MAF (83 percent of total capacity) or 125 percent of historical average as of the date of this report.

Current Demand	Acre-Feet
Member Agency Consumptive ¹	1,264,000
Member Agency Replenishment	68,000
Coachella Valley Water District Agreement	15,000
Return to Imperial Irrigation District ²	0
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	50,000
Cyclic Deliveries	0
Total Demands ³	1,413,000

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

² Per USBR Forecast (3/13/23).

³ Total may not sum due to rounding.

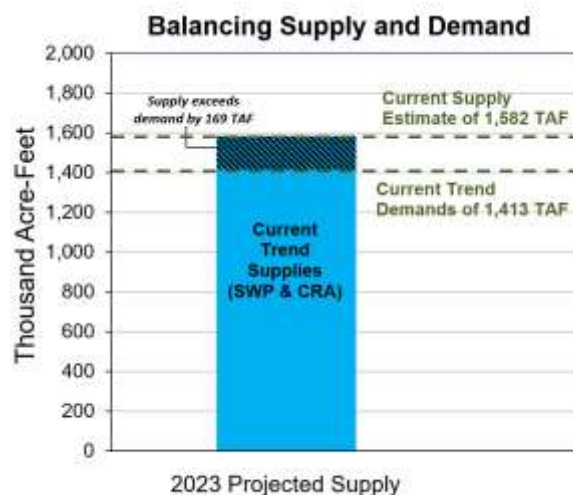


The current trend consumptive and replenishment demand for CY 2023 is projected to be below the 5-year average due to ongoing conservation and the improving local supply conditions from the substantial precipitation received in Metropolitan's service area and member agencies' watersheds.

MANAGING REGIONAL SUPPLY AND DEMAND

Supply/Demand Balance	Acre-Feet
Total Supplies	1,582,000
Total Demands	1,413,000
Current Balance Estimate ¹	169,000

¹ Total may not sum due to rounding.



WSDM Strategies/Actions

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

- Storing surplus supplies in a manner to achieve equitable reliability across the region.
- Evaluating transfer supply opportunities and ability to move any north-of-Delta transfers.
- Balance use of available imported supplies from both the SWP and Colorado River.
- Continue coordination with our partners to maximize supply development.
- Continue to utilize and manage storage assets to satisfy current and future year demands, with special emphasis on rebuilding storage for SWP Dependent Area.
- Incorporate new drought actions into existing suite of WSDM actions.
- Staff does not anticipate a need for a regionwide WSAP supply allocation during fiscal year 2023-24 due to improved conditions.

2023 WSDM Storage Detail

	1/1/2023 Estimated Storage Levels ¹	CY 2023 Put Capacity ²	2023 Total Storage Capacity
WSDM Storage			
Colorado River Aqueduct Delivery System	1,139,000	400,000	1,657,000
Lake Mead ICS	1,139,000 ³	400,000	1,657,000
State Water Project System	502,000	638,000	1,897,000
MWD SWP Carryover ⁴	39,000	215,000	350,000
DWCV SWP Carryover ⁴			
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic and Perris DWR Flex Storage	3,000	216,000	219,000
Arvin Edison Storage Program	119,000	0 ⁵	350,000
Semitropic Storage Program	158,000	131,000	350,000
Kern Delta Storage Program	137,000	45,000	250,000
Mojave Storage Program	19,000	10,000	330,000
AVEK Storage Program	27,000	3,000	30,000
AVEK High Desert Water Bank Program	0	18,000 ⁶	18,000 ⁷
In-Region Supplies and WSDM Actions	698,000	407,000	1,246,000
Diamond Valley Lake	494,000	316,000	810,000
Lake Mathews and Lake Skinner	194,000	32,000	226,000
Conjunctive Use Programs (CUP) ⁸	10,000	59,000	210,000
Other Programs	662,000	303,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	281,000	303,000	800,000
Total	3,001,000	1,748,000	5,981,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) ⁹	2,251,000	1,748,000	5,231,000

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

² Put capacity assumed under a 35 percent SWP Table A Allocation. Storage program losses included where applicable.

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

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

⁵ Puts are limited due to water quality considerations.

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

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

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

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

Future Contributions and Obligations and Cyclic Programs

Table 1: Future Obligations

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

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

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

³ Up to 30,000 AF per year.

⁴ Obligation to be met by the end of 2026.

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

⁶ Deferred delivery from Calleguas Municipal Water District, Upper San Gabriel Valley Municipal Water District, and Three Valleys Municipal Water District. Metropolitan will deliver water to the member agencies by 2027.

⁷ Metropolitan's CY 2022 Human Health & Safety deliveries. This water must be returned by 2027. If the SWP allocation reaches 40 percent or greater, a minimum obligation of 96,000 acre-feet is required.

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

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

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

Table 3: Cyclic Program Activity

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

¹ Projected Cyclic program activity for the year. Subject to change.

Future Supply and Demand Gaps

(Estimate as of December 2022)

Metropolitan's Water Surplus and Drought Management Plan provides a framework for managing Metropolitan's resources in periods of surplus and shortage. To guide the WSDM actions, Metropolitan constructs plausible scenarios with different supply and demand assumptions. The table below shows the projected range of plausible end-of-year supply and demand balances for CY 2023 and 2024. These ranges provide a bookend for the wide range of supply and demand balances that may unfold.

To reflect a reasonable range of future outcomes, the low supply projection is coupled with high demand projection as one bookend and the high supply projection is coupled with the low demand projection for the other bookend. The resulting ranges are shown in the table below. In 2023, the shortage projection for the service area is shown as ~520 TAF with a five percent SWP Table A allocation and Human Health and Safety (HH&S) supply, low Colorado River supply, and high demands. A surplus of ~725 TAF is shown with a 70 percent SWP Table A allocation, high Colorado River supply, and low demands. For 2024, the supply and demand balances may range from a shortage of ~920 TAF to a surplus of ~865 TAF. Regardless of the conditions that may materialize in the next two years, Metropolitan will continue to adhere to the WSDM Plan to capture surplus amount of water in normal to wet conditions and use stored water and drought actions in drought conditions.

	2023 (TAF)		2024 (TAF)	
Item	Low Supply/High Demand	High Supply/Low Demand	Low Supply/High Demand	High Supply/Low Demand
SWP ¹	+300	+1,340	+300	+1,340
Colorado River ²	+960	+1,005	+660	+985
Demand on Metropolitan ³	-1,700	-1,400	-1,800	-1,200
Additional Obligations ⁴	-80	-220	-80	-260
Supply/Demand Balance ⁵	(-520)	725	(-920)	865

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

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

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

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

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



One Water and Stewardship Committee

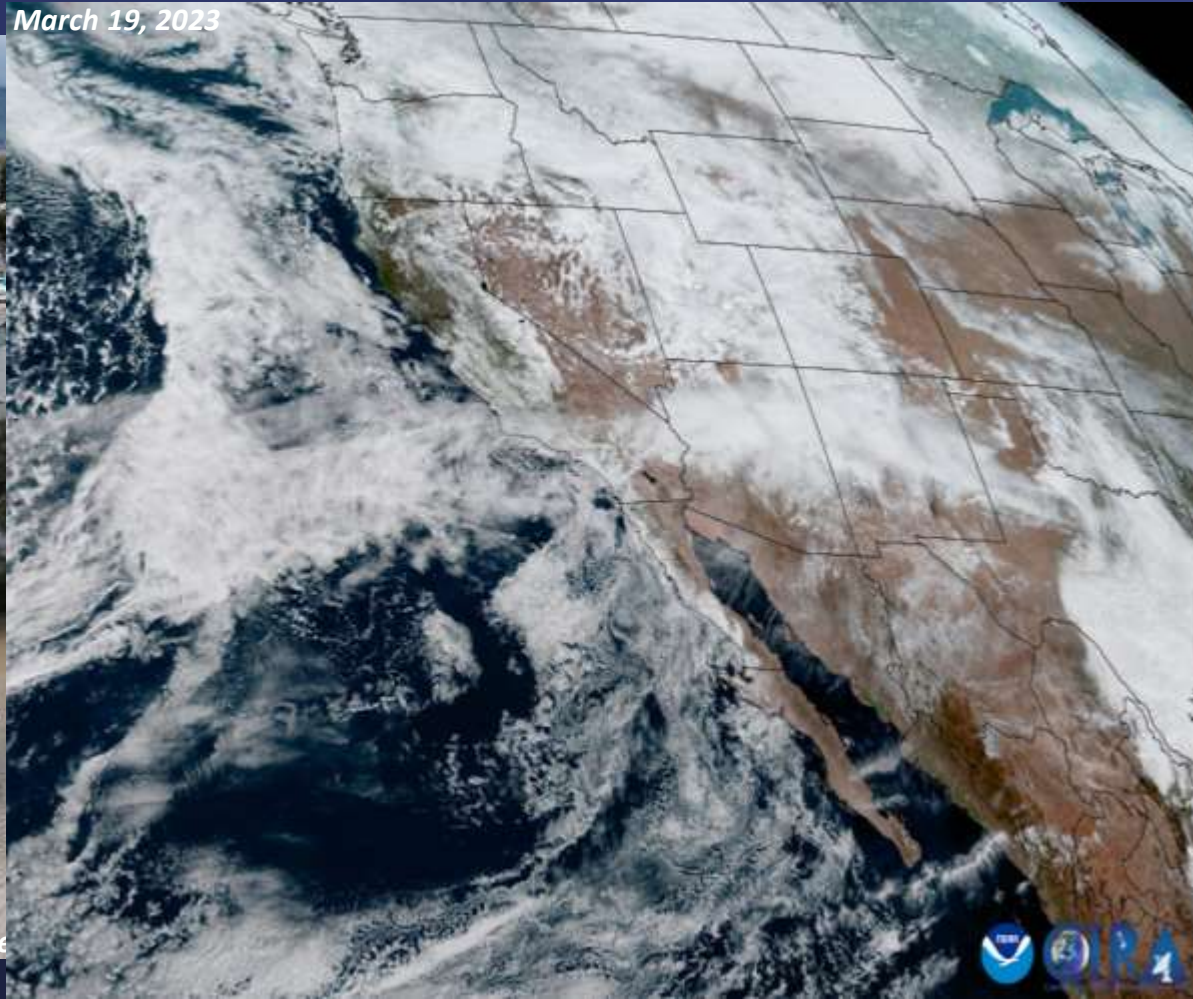
Update on WSDM

Item 6e
April 10, 2023

Hydrologic Conditions

Winter Storms Continue to Pummel California & the West

March 19, 2023

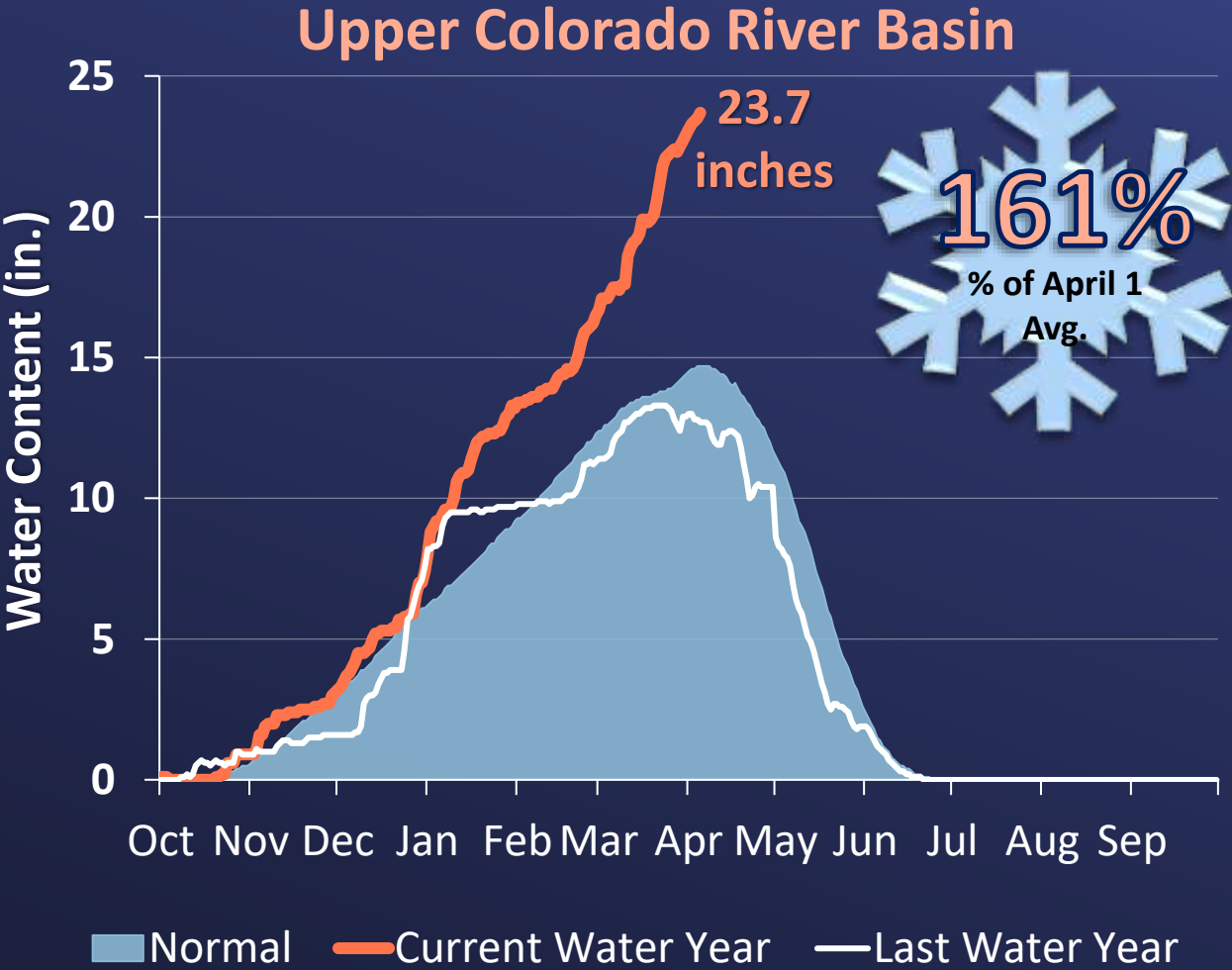


March 28, 2023



Near Record Snowpack for Upper Colorado River Basin

As of 04/05/2023



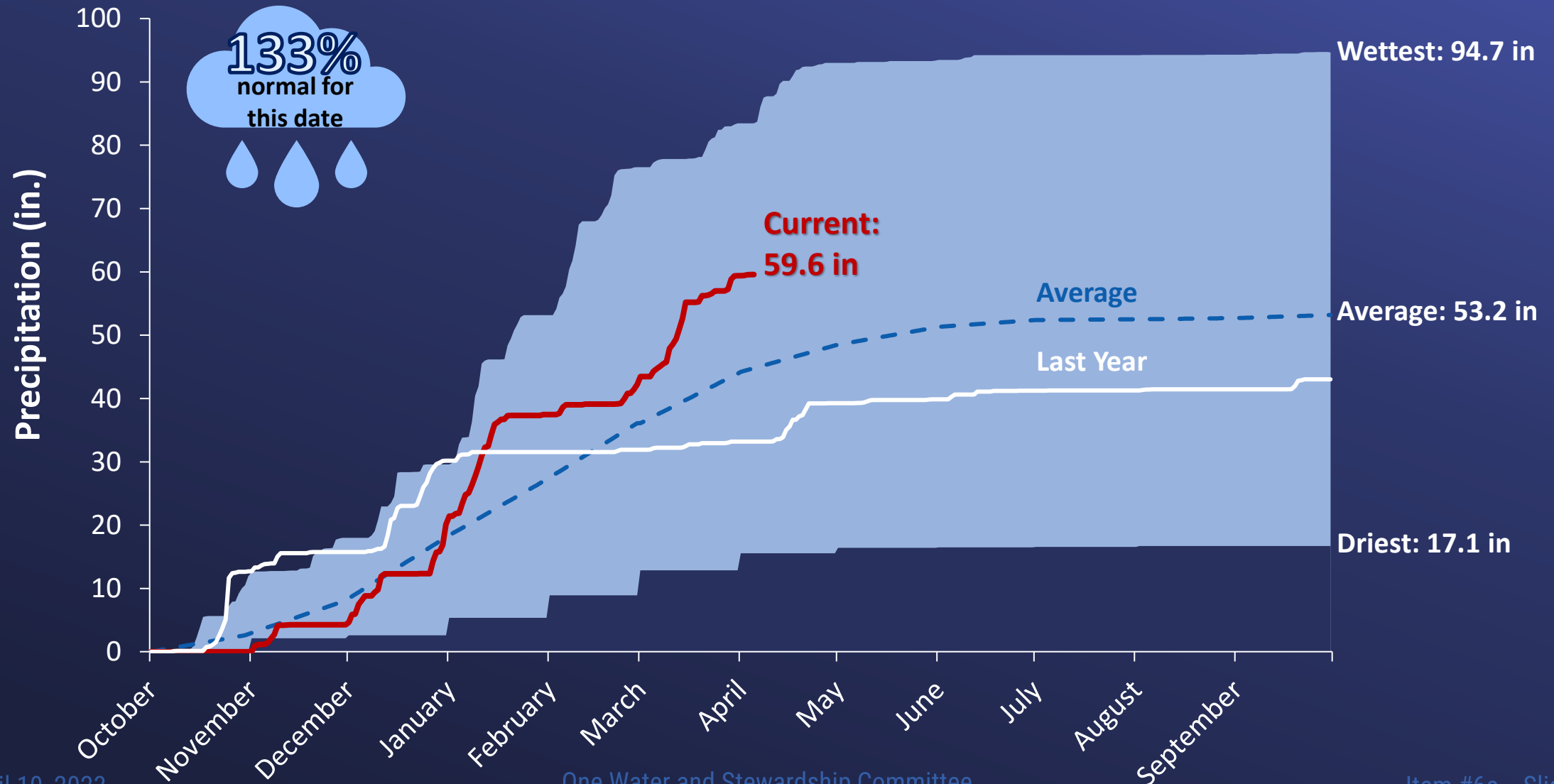
Colorado River Update

Evolving Discussions with Reclamation

- Metropolitan temporarily turning over some Colorado River programs to the federal government (2023-26)
- Such programs would augment Lake Mead levels, rather than coming through CRA to Metropolitan
 - Metropolitan reduces CRA pumping and backfills supplies from those programs with SWP water
- Inflation Reduction Act funds would be used to pay for those programs, reducing Metropolitan's costs
 - Metropolitan would also receive revenue for fallowing its own lands in PVID
- In future years, Metropolitan has option to “call-back” programs, if conditions warrant

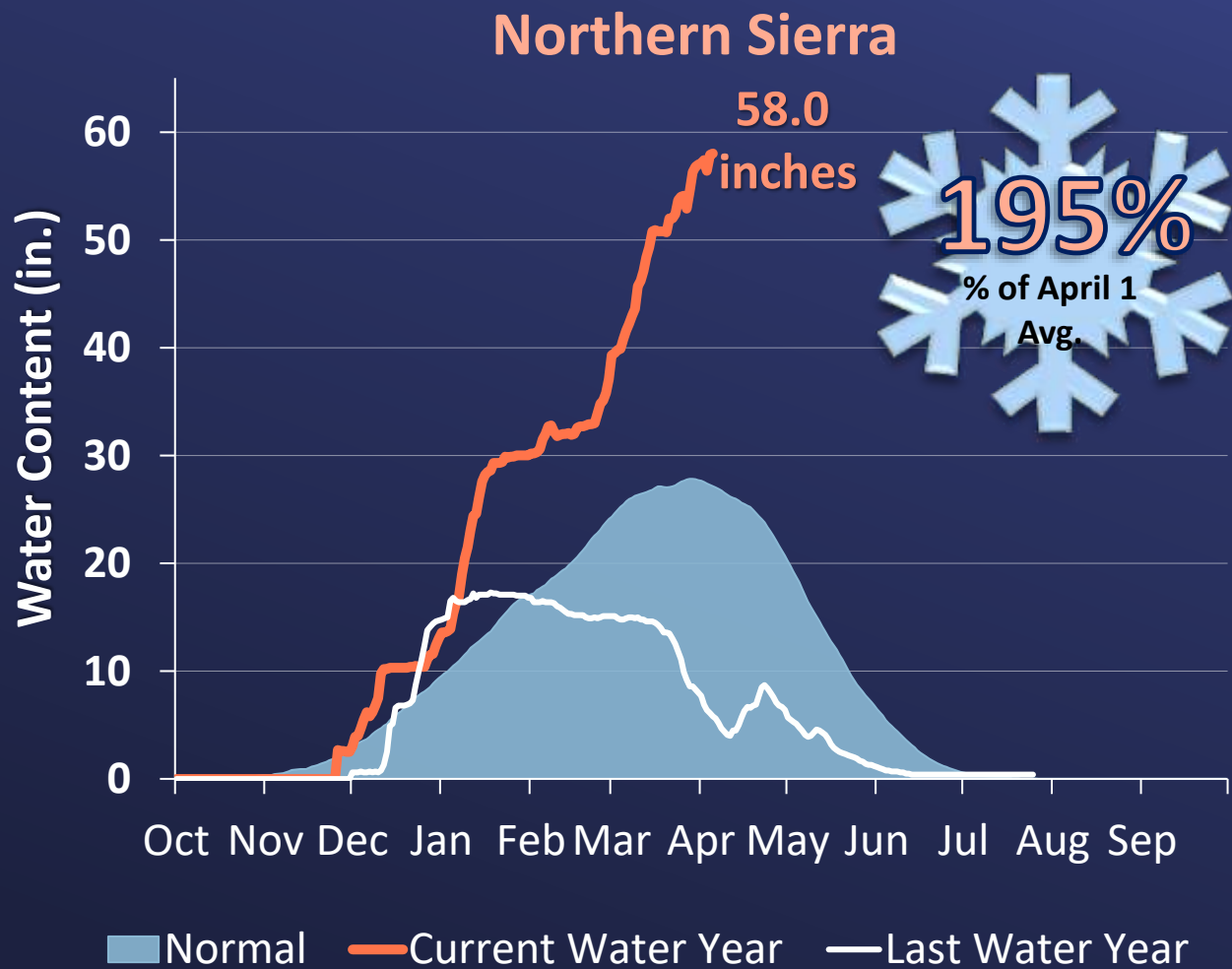
Northern Sierra Precipitation: 8-Station Index

As of 04/05/2023



Near Record Snowpack for Northern Sierra

As of 04/05/2023



Credit: California Department of Water Resources

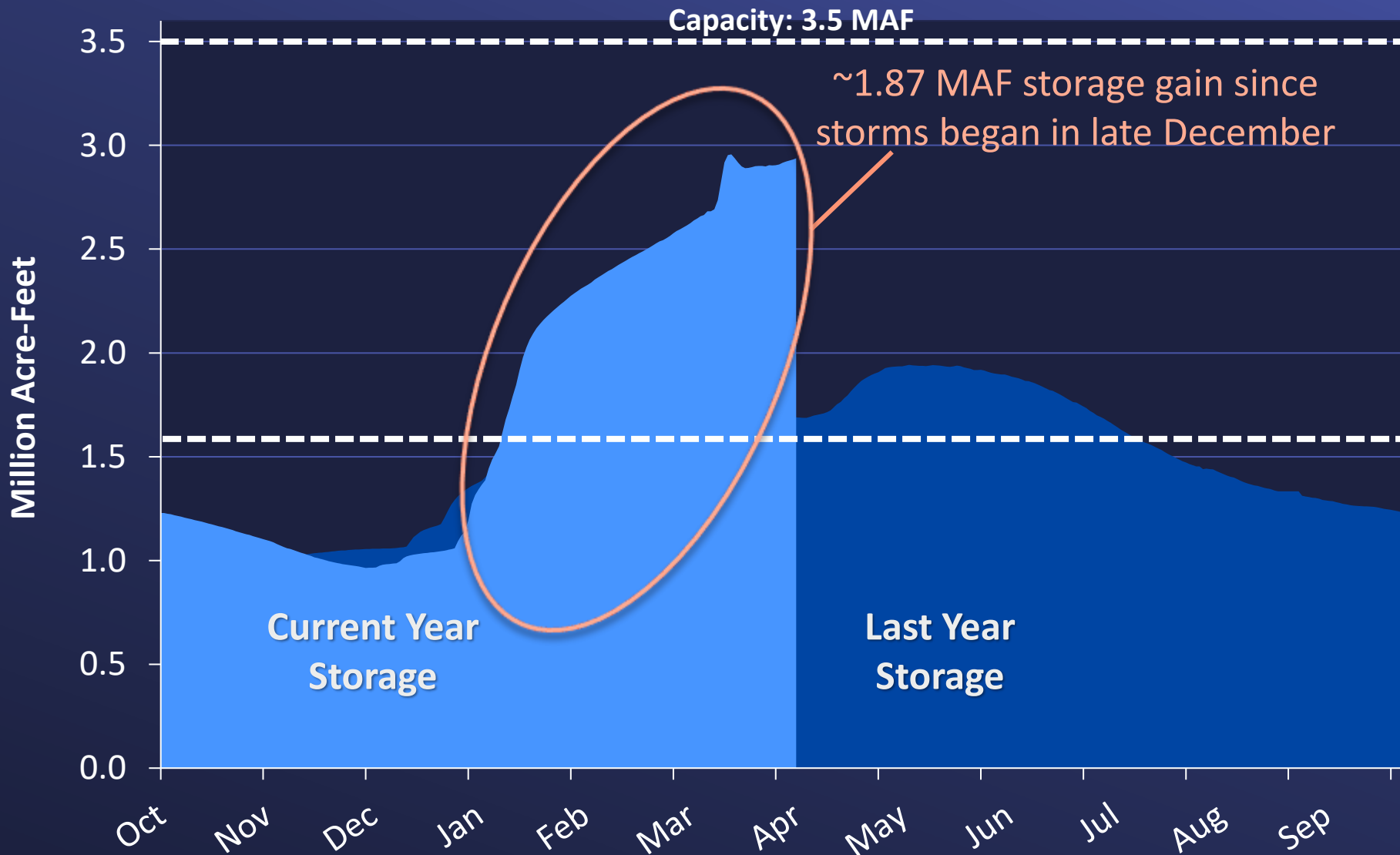
Significant Snowpack Gains throughout the Sierra Nevada

As of 04/05/2023



Significant Gains in Lake Oroville Storage

As of 04/05/2023



DWR Continues Releases from Oroville Spillway

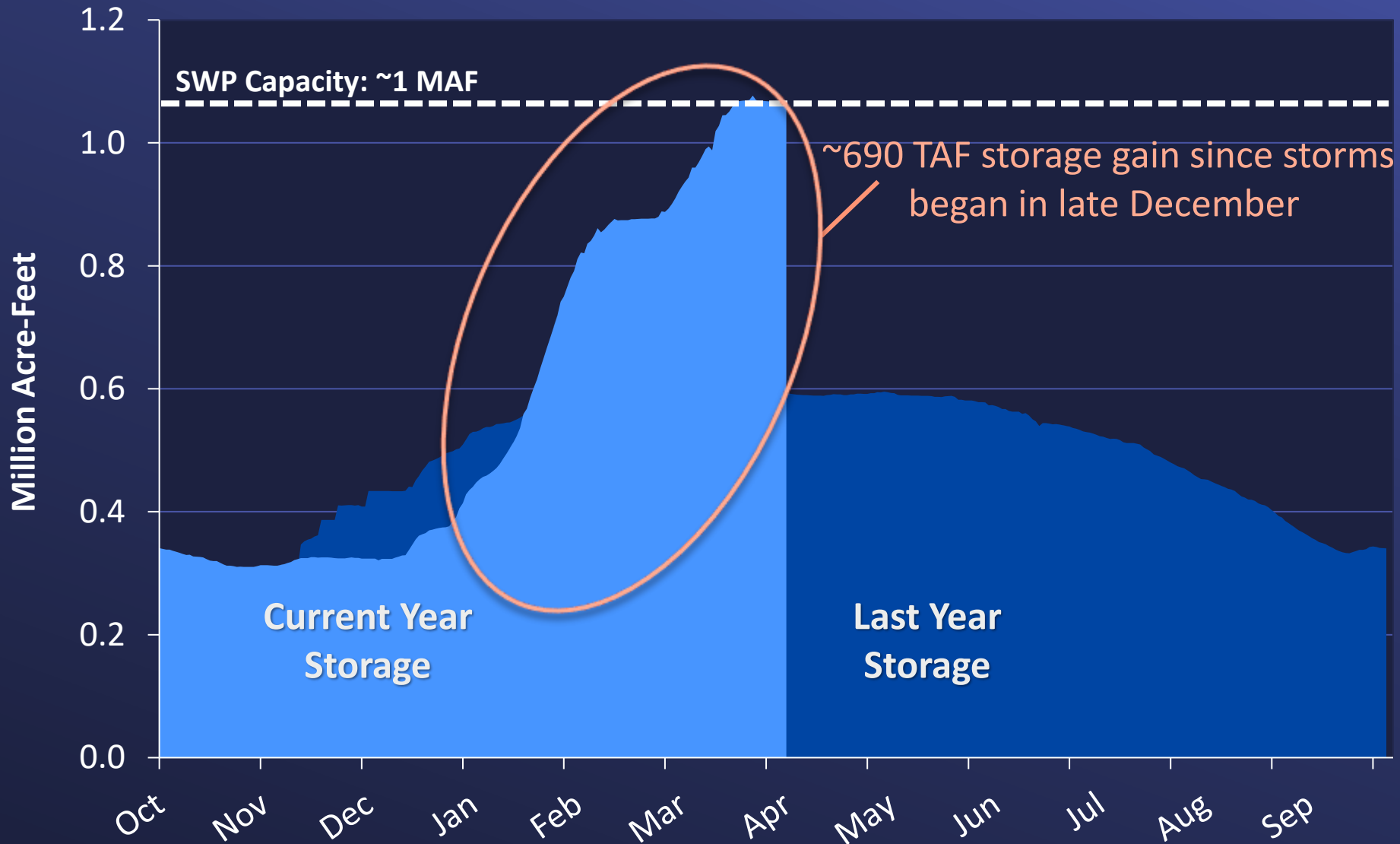


Credit: California Department of Water Resources



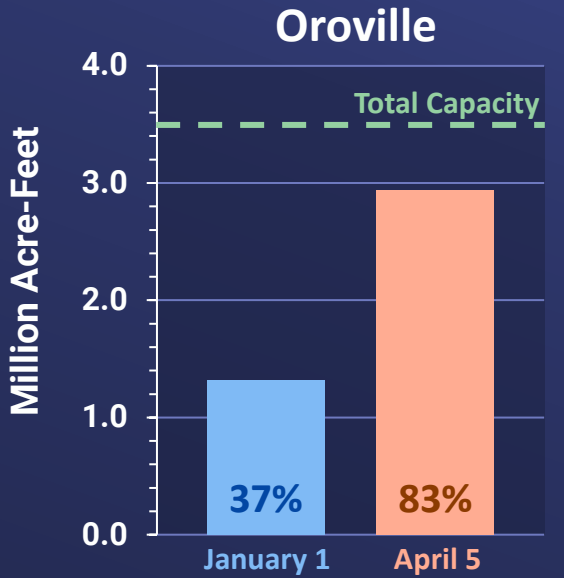
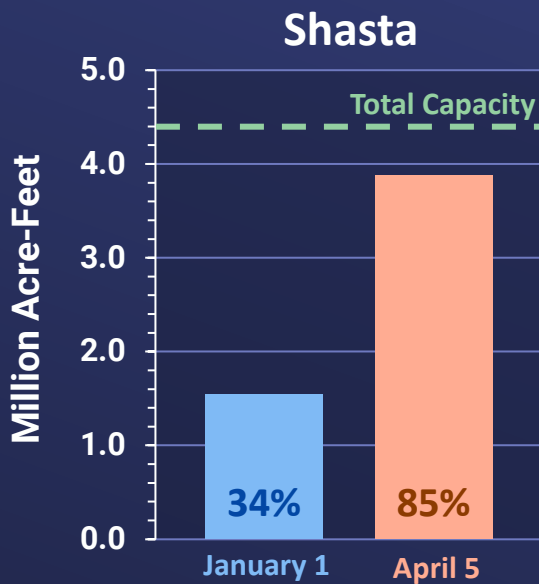
SWP Share of San Luis Reservoir Currently Full

As of 04/05/2023



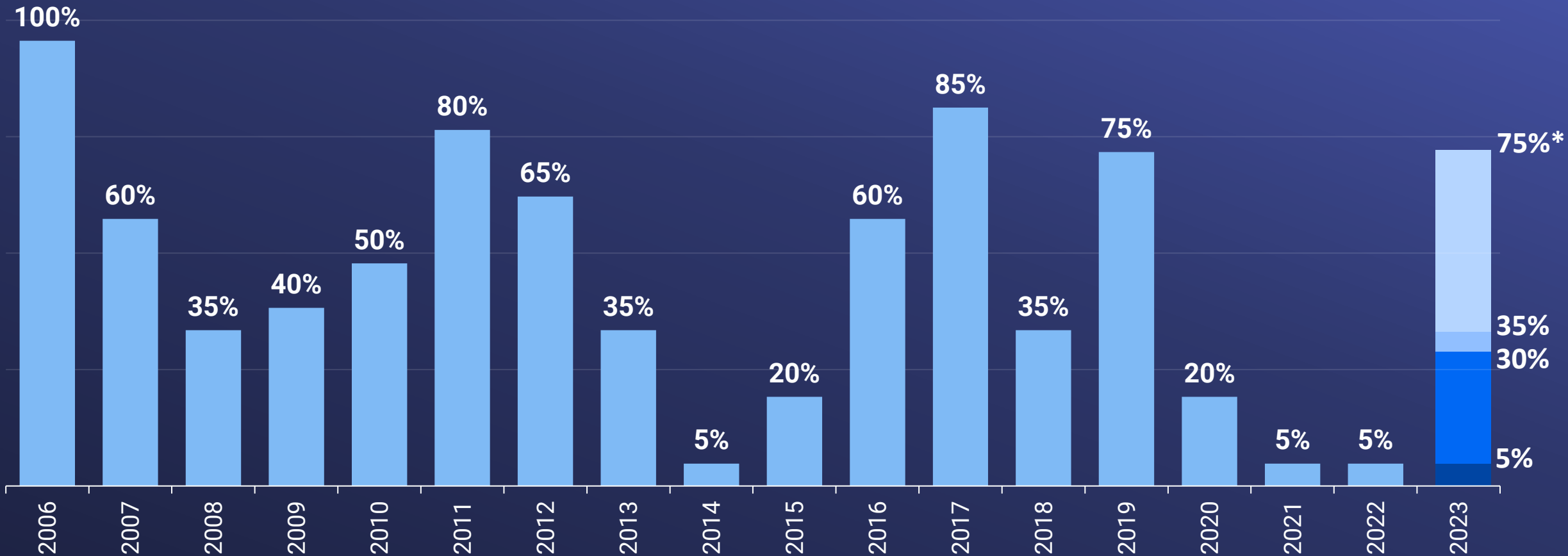
Water Supply Demand Balance

Major Water Systems are Improving by Capturing Winter Storms



Note: Displaying percent of total capacity.

SWP Allocation Increasing as Major Water Systems Improve



** Current 2023 SWP Table A Allocation, as of March 24, 2023. Additional increases possible before 2023 SWP Table A Allocation is final.*

WSDM Update

SWP Table A Allocation Increases to 75%

- SWP Allocation increased from 35% to 75%
 - Continual improvement in hydrologic conditions from February and March storm events
 - Record snowpack all throughout Sierra Nevada
 - Additional increases to the SWP Allocation may occur
- Governor Newsom issued Executive Order N-5-23
 - State of emergency for the entire state continues
 - Local water agencies no longer required to implement Level 2 actions of Water Shortage Contingency Plans
 - Wasteful watering practices continue to be banned

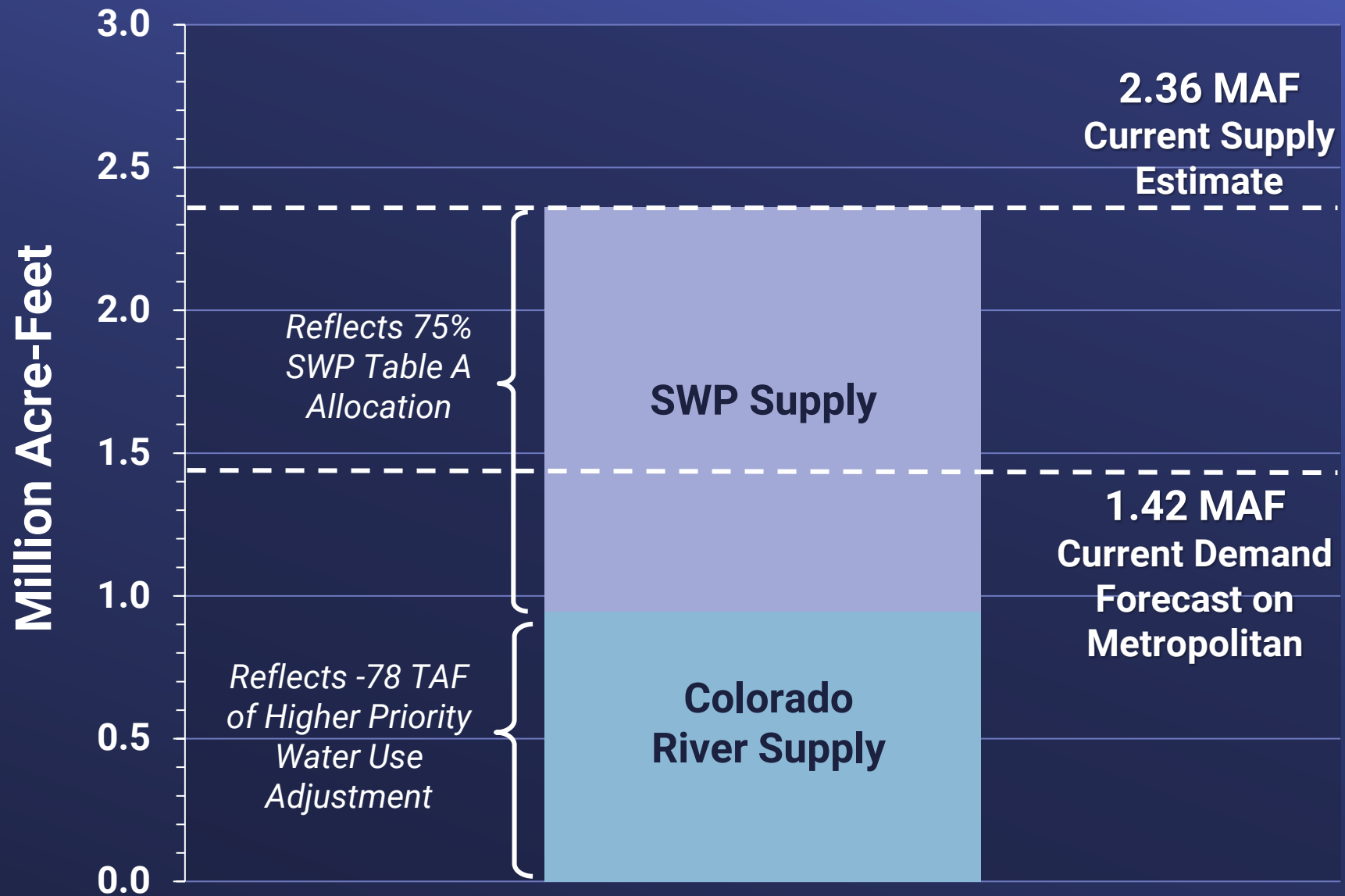
WSDM Update

Article 21 Supplies

- Article 21 supplies are additional supplies above the SWP Table A Allocation
- Article 21 supplies are allocated week-to-week, and available to SWP Contractors when:
 - 1) SWP share of San Luis Reservoir is full
 - 2) Contractor demands are met and additional supplies available for export from Delta
 - 3) SWP Contractor can store supplies in non-SWP facilities
- Article 21 supplies were first made available in late March
 - Metropolitan has taken delivery of all of its allocated Article 21 supplies to date (123 TAF)

2023 Water Supply Demand Balance

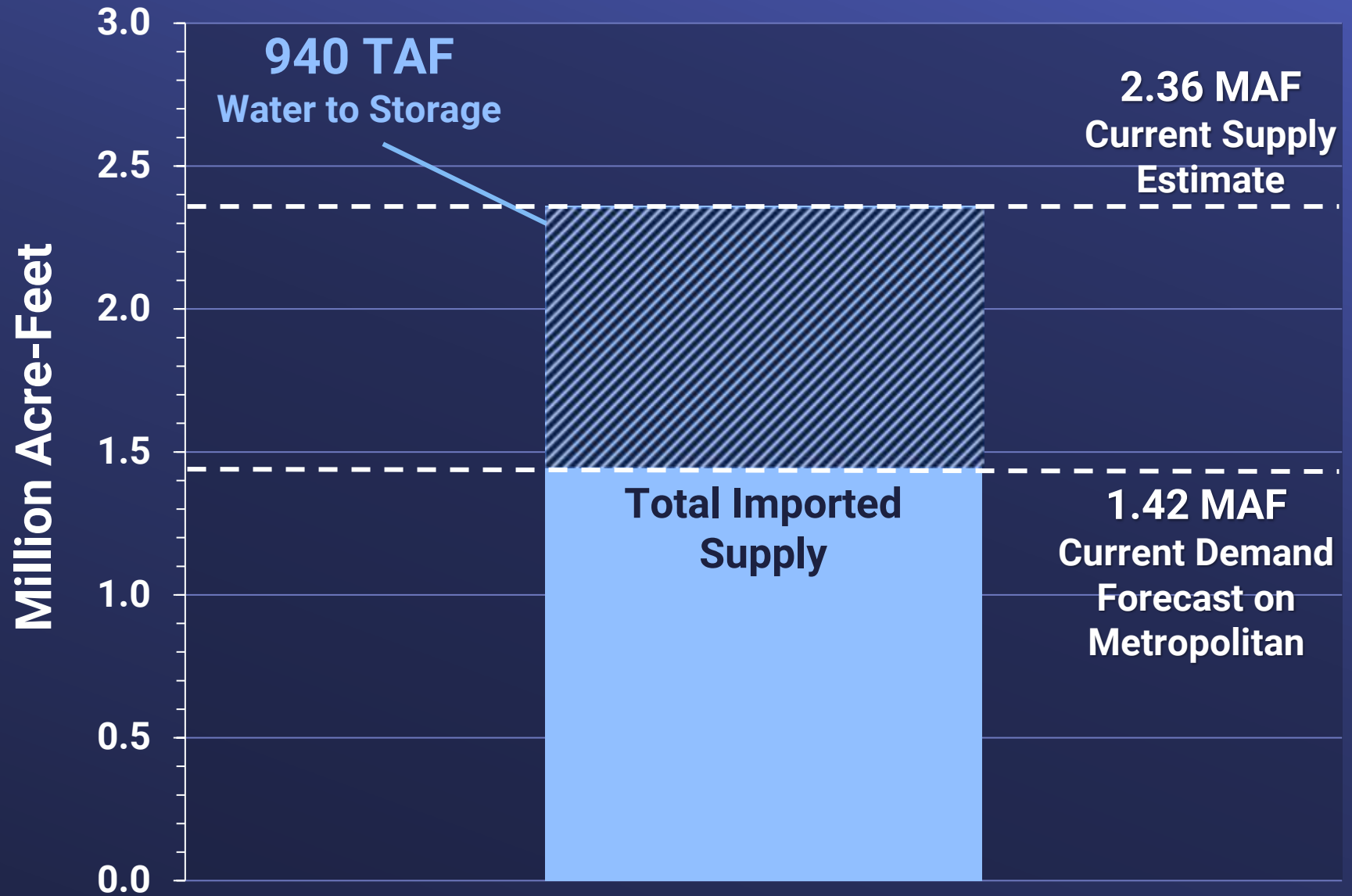
Improved Conditions Allow for Puts into Storage



Notes: 1) Demand includes deliveries to local storage & groundwater basins.
2) Puts to storage will increase as increases in SWP Table A Allocation and Article 21 supplies occur.
3) Data as of April 4, 2023.

2023 Water Supply Demand Balance

Improved Conditions Allow for Puts into Storage



Notes: 1) Demand includes deliveries to local storage & groundwater basins.
2) Puts to storage will increase as increases in SWP Table A Allocation and Article 21 supplies occur.
3) Data as of April 4, 2023.

Metropolitan Storage: 2023 Starting Balance of 2.24 MAF



Note: Total 2023 starting balance does not include emergency storage.

Metropolitan Storage: 2023 Ending Balance of **3.18 MAF**



Notes:

- 1) Dashed lines indicate 2023 starting storage balances.
- 2) Ending storage balances are projections (as of April 4, 2023) and will vary based on actual conditions.
- 3) Total 2023 ending balance does not include emergency storage.

Refilling Storage at Diamond Valley Lake

03/27/2023



One Water Management

Adapting to Climate Change & Ongoing Uncertainties

- California vulnerable to extreme, variable weather
- Other uncertainties (regulations, legal, environmental, etc.) continue to threaten water supplies
- Water use efficiency efforts are critical
 - Metropolitan and local water agencies provide rebates and water saving tips
- Investments in a One Water approach allow us to better adapt to changed conditions
 - Metropolitan investing in innovative approaches, such as Pure Water Southern California





One Water and Stewardship Committee

Conservation Update

Item 6f

April 10, 2023

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

	Paid ⁽²⁾	Committed ⁽³⁾
Regional Devices	\$6.4 M	\$3.5 M
Member Agency Administered	\$6.0 M	\$6.5 M
Turf Replacement	\$12.6 M	\$36.3 M
Advertising	\$4.8 M	\$2.2 M
Other	\$1.4 M	\$1.3 M
TOTAL	\$31.2 M	\$49.8 M

- (1) The Conservation Program biennial expenditure authorization is \$86M.
- (2) As of 7/1/2022 –2/28/2023. Financial reporting has changed from modified accrual to cash basis. This resulted in \$9.2M of expenditures that were accrued last year but paid in cash this fiscal year.
- (3) Committed dollars as of March 10, 2023.

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



Turf Replacement Rebates:

February: 1,379,243 ft² removed

FY2022/23-FY2023/24: 6,068,432 ft² removed



Toilets:

February: 2,708 units rebated

FY2022/23-FY2023/24: 17,986 units rebated



Rain Barrels and Cisterns:

February: 2,085 units rebated

FY2022/23-FY2023/24: 2,606 units rebated

Lifetime Water Savings to be achieved by all rebates in February 2023: 8,406 AF

FY2022/23-FY2023/24: 37,626 AF lifetime water savings

Innovative Conservation Program (ICP)

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



2022 ICP: Recipients Selected

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

Staff Responds to California Energy Commission Request for Information

- California Energy Commission (CEC) is responsible for setting minimum efficiency levels for energy and water consumption in products, such as household appliances and plumbing equipment
- CEC issued a Request for Information as they consider updating efficiency standards for water closets
- Metropolitan submitted data to provide context as CEC considers updating efficiency standards
 - Regional toilet rebate activity from 1991-present
 - Flume Household Water Use Study flush volume analysis of existing toilets





• Colorado River Management Report

Summary

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

Purpose

Informational

Detailed Report

Request for Input on the Lower Colorado River Basin System Conservation and Efficiency Program

The U.S. Bureau of Reclamation's (Reclamation) Lower Colorado Region is seeking input on the Lower Colorado River Basin System Conservation and Efficiency Program to establish longer-term durable system efficiency improvements that result in water conservation for the benefit of the lower Colorado River System, specifically the types and nature of projects that should be eligible and evaluation criteria for suggested projects. This is the second phase of a program announced in October 2022 after \$4 billion was provided in the Inflation Reduction Act for drought response, with a priority for the Colorado River Basin. Reclamation will accept proposals from Colorado River water delivery contract or entitlement holders and the Central Arizona Project water delivery contract or entitlement holders, including partnership with such entities. Comments on the process for evaluating proposals are due April 6, 2023. Reclamation anticipates sending out a solicitation for specific projects later this spring.

Improved Water Supply Conditions in the Colorado River Basin

The month of March has seen a series of cold and wet storms in the Colorado River Basin. The March 15 forecast of unregulated April through July 2023 inflow into Lake Powell was 156 percent of average, and indications are that the April 1 runoff forecast will be higher than that amount. With the significant increase in anticipated runoff, it is likely that Reclamation will switch to balancing operations for the remainder of water year 2023. Reclamation will make the official determination when it completes the April 24-month operational study in mid-April 2023. If the operations do switch to balancing, it means that Reclamation will adjust Lake Powell outflow so that both Lake Powell and Lake Mead will end the water year (September 30, 2023) with the same storage volume. The balancing releases do have a cap of 9.5 million acre-feet, and there are some operational challenges getting that much water out of Lake Powell, so the actual elevations might not match at the end of the water year. In any case, it is anticipated that Lake Powell will release significantly more water than had been planned a few months ago, and that Lake Mead and Lake Powell storage will increase somewhat this year. These storage increases might alleviate the need for short-term water supply reductions and provide the states time to focus on the post-2026 guidelines. It is anticipated that climate change impacts will require significant and permanent long-term reduction in deliveries from the Colorado River.



● Bay-Delta Management Report

Summary

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

Purpose

Informational

Detailed Report

Delta Conveyance

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

The U.S. Army Corps of Engineers (USACE), as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, released a draft Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act for a public review that ended on March 16. USACE is starting the initial organization of the comments received.

Sites Reservoir

In their March joint meetings, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) authorized the submittal of the U.S. Environmental Protection Agency's (USEPA) Water Infrastructure Finance and Innovation Act (WIFIA) application. Although the application does not constitute commitment to a WIFIA loan, it does initiate an approximate 12-month negotiation process with the USEPA regarding the loan agreement. After receiving the application, USEPA WIFIA staff will begin an in-depth review of the Sites Reservoir Project (Project) and the Sites Authority's credit.

The Reservoir Committee and Authority Board also approved the submittal of the California Independent System Operator (CAISO) interconnection request application. The Project will require power for day-to-day operations and will generate incidental power upon releases of water from the reservoir, which is expected to offset about half of the power needs. The proposed interconnection request would put the project into the long line of requests and initiate a lengthy study process that can take more than two years to complete. By interconnecting with CAISO directly, the Project would have the ability to engage in the wholesale electrical energy market, which has the potential to be more cost-effective than going through Pacific Gas & Electric.

Near-Term Delta Actions

Regulatory Activities

Staff continued to participate in the collaborative science groups set up to inform implementation of the 2019 Biological Opinions (BiOp) for the State Water Project (SWP) and Central Valley Project, and the 2020 Incidental Take Permit (ITP) for long-term operation of the SWP. In March, staff participated in Delta Coordination Group meetings with state and federal water contractors, resource agencies, and fisheries agencies to develop tentative recommendations on the implementation of Summer Fall Habitat Actions for Delta Smelt as mandated by the BiOp and ITP. Recommendations are tentative as water year designation is not yet official and the actions are contingent on water year type.

Staff is participating on a Science Committee developing the Voluntary Agreement Science Plan. This plan provides the framework and specific approach for evaluating the outcomes of the flow and non-flow measures

Date of Report: 4/11/2023

Board Report (Bay-Delta Management Report)

proposed as part of the Voluntary Agreements for the Sacramento River, Delta, and Tributary update to the San Francisco Bay/Sacramento-San Joaquin Delta Water Quality Control Plan. The science plan builds on an initial framework describing the metrics, monitoring, and outcomes for Voluntary Agreement commitment actions provided to the State Water Resources Control Board in October 2022, and provides additional detail on the hypotheses, metrics, existing monitoring programs, and the approach for analyses that will be leveraged for understanding outcomes of Voluntary Agreement actions.

Ecosystem Restoration

The Delta Stewardship Council is working with diverse groups of interests to develop a draft Adaptation Strategy for the Delta Adapts Initiative, which is focused on understanding climate change risks in the Delta and developing adaptation strategies. Staff participated in the Delta Adapts Ecosystem Focus Group #3 on March 13, which focused on presenting ecosystem adaptation scenarios and refining criteria that will be used to prioritize projects in the Delta region.

Delta Island Activities

Staff is working internally to coordinate submission of a full grant application to the Delta Conservancy's Nature Based Solutions: Wetland Restoration Grant Program for a \$20 million grant that will fund development of a mosaic of managed flooded wetlands and rice fields on Webb Tract to stop subsidence, reduce greenhouse gas emissions, and generate income from carbon credits and lease agreements. Staff plans to update the Board at the April 2023 Bay-Delta Subcommittee meeting. The Delta Conservancy Board will consider the Webb Tract grant application at their July 2023 board meeting.

Quarterly Bay-Delta Science Update

Metropolitan's Bay-Delta Science Program is directed at supporting strong science for protecting the Bay-Delta environment, driving better management decisions, and supporting effective regulations. The following summary of Bay-Delta Science activities provides key highlights for the period January 1 to March 31, 2023.

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

Bay-Delta Science Update, January - March 2023

Science Objective	Accomplishments
Collaborative Science	<p>Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP) with state and federal agencies, water agencies and the NGO environmental community. Key progress this quarter focused on efforts to facilitate recovery planning for salmon.</p> <p>Reorienting to Salmonid Recovery Project – Staff efforts focused on planning and initiating Phase 3 of the project which includes developing an agreed-upon suite of priorities for salmonid recovery. Phase 3 will use an iterative approach with participants and modelers to review and refine recovery scenarios, run simplified models, and review preliminary results, allowing ample opportunity for refinement of scenarios before final model runs are conducted. Staff is organizing intensive workshops for participants to work in groups using web applications developed to evaluate model output sensitivity to different salmonid management scenarios. These online tools will help participants better understand and address the trade-offs associated with different suites of recovery actions. The first workshop was held in March, and two to four additional workshops will be held between May and December 2023.</p>
Science Investigations	<p>Staff continued to collaborate with university researchers, science experts, and state and federal agencies to carry out science studies. Staff attended the 2023 Interagency Ecological Program Annual Workshop March 21-23. The workshop included sessions on native fish species in the Delta, habitat restoration, water quality, food web, and invasive aquatic plants. The workshop included multiple presentations and posters reporting on collaborative science</p>

Board Report (Bay-Delta Management Report)

Science Objective	Accomplishments
	studies between Metropolitan and state and federal agencies, university researchers, and consulting experts. Staff co-authored poster presentations on Delta smelt supplementation research, longfin smelt entrainment risk, and pathogen exposure for out-migrating salmon.
Innovation	Staff worked with researchers from UC Davis to conduct the Delta Smelt Pilot Propagation study. The study is using impoundments on Bouldin Island to conduct a proof-of-concept study by placing hatchery Delta smelt in enclosures in the impoundments and monitoring their condition. The first deployment was completed in January 2023, and the study successfully demonstrated impoundments as a viable tool for aquaculture of Delta smelt on Metropolitan's Delta Islands properties in the effort to produce more Delta smelt for supplementation into the wild. The second deployment of Delta smelt to the impoundments was initiated in February 2023. The objective of the second study is to repeat and verify the results and test conditions during a warmer period. Staff conducted field sampling of the Delta smelt in the study impoundments in March. The fish appear to be thriving with good survival and growth.
Delta Science Community	Staff participated in a decision analysis tools training through the U.S. Fish and Wildlife Service National Conservation Training Center to develop a greater practical understanding of the most common quantitative methods. These skills help support evaluation of the consequences and tradeoffs among alternatives of any decision problem.



One Water & Stewardship Committee

Quarterly Update from the Chief Sustainability, Resilience and Innovation Office

Item 7d

April 10, 2023



S U S T A I N A B I L I T Y
R E S I L I E N C E
I N N O V A T I O N



Empowering Metropolitan to deliver its
core mission by inspiring and
implementing solutions that benefit
people, nature and the climate

Sustainability

Metropolitan can meet the current ecological, social and economic needs for water without compromising the ability to meet those needs in the future

- District-wide Goals and Metrics
- Employee Trainings
- Community Engagement

Resilience

Metropolitan's water system functions so that nature and people, including those disproportionately impacted by climate change, adapt and thrive under shocks, stresses and change

- Identifying vulnerabilities
- Climate Action and Adaptation
- Environmental planning and ecological land management

Innovation

Metropolitan plans and prepares for the future through testing new technologies and data tracking, incorporating science, and collaboration and partnerships

- Technology pilots
- Research and science
- Grants and partnerships

Metropolitan's Sustainability Strategy includes Guiding Principles, Section-Specific Goals and Key Performance Indicators



Sustainability

Metropolitan can meet the current ecological, social and economic needs for water without compromising the ability to meet those needs in the future

Metropolitan SRI Council

- An internal think tank of sustainability, resilience and innovation champions
- Council composed of 17 members representing all Metropolitan Groups
- Will catalyze SRI initiatives within and between Metropolitan Groups
- Empowered to elevate staff ideas & SRI initiatives

Metropolitan SRI Council



Sam Smalls
Finance



Michael Thomas
Engineering



Victor Ramirez
Real Property



Jonathan Houck
IT



Joseph Chavez
External Affairs



Jennifer Nevills
Bay Delta



Brenda Marines
Env. Planning



Paul Rochelle
WSO



Rick Duarte
DEI



Kiersten Melville
WSO



Eric Bachmann
Human Resources



Scott McMullen
WSO



Meena Anderson
Colorado River

Ben Calmes,
Administrative Services

Jennifer McCarthy,
WRM

Mark Parson, Legal

Sustainability

Metropolitan can meet the current ecological, social and economic needs for water without compromising the ability to meet those needs in the future

Trainings and Engagement

Engineering Services Group Presents
The Technical Brown Bag Series
In partnership with
The Office of Sustainability, Resilience, and Innovation

Introducing Envision Sustainable Infrastructure Framework to Metropolitan

This presentation will provide participants with an introduction to the Envision framework and foster conversations with Metropolitan's Office of Sustainability, Resilience, and Innovation on opportunities throughout the district.

Presented by
Dr. Akima Cornell
Akima Consulting, LLC

Click **HERE** to sign up.
**Meeting will be both in-person & via Zoom. Lunch will be provided to in-person attendees who RSVP by 1/27/2023.

THE ENVISION™ RATING SYSTEM

Tuesday Jan. 31, 2023 11:30-12:15pm
Headquarters US2-456

Sustainability Systems and Services Lunch Learn

Tuesday, February 21, 2023
11:30am - 12:15pm
Meyersuch 677, Water Quality Lab 215A - C and 600m

Innovative Portable Power Solutions for Water System Operations
Speaker: Robert Petrick, Technical Team Manager for the 8th Treatment Plant

Given energy solutions and zero emissions, the latest buzz phrase in the push to eliminate greenhouse gas emissions, Metropolitan is incorporating innovative portable solar battery storage systems that can offset the need for internal combustion generators. Learn how this innovative technology is being used by our DWM teams in the field. Join us to learn more about the capabilities, limitations, environmental footprint of impacts, and the future of portable battery storage systems.

Click here to register to person or via zoom. Lunch will be provided to the first 50 in-person registrants.

SUSTAINABILITY ESSENCE INNOVATION SUSTAINABILITY EXPO

The Office of Sustainability, Resilience and Innovation is pleased to host the Sustainability Expo and Earth Day event.

April 25, 2023
8:30 a.m. to 1 p.m. at the Los Angeles headquarters building

Metropolitan employees and board members are invited to learn from seminars and exhibits about how Metropolitan is a leader on sustainability.

Highlights include:

- Interactive Innovation Pavilion with internal and outside guest exhibits
- Panel discussion, "Sustainability from an Employee Perspective"
- Celebration of Metropolitan role model champions
- Metropolitan Photography Club photo exhibit
- Grab and Go vegetarian lunch for all registrants
- Photo booth to capture the Expo's evergreen memories
- Eco-themed raffles and giveaways

The 2023 Sustainability Expo will be a day for learning, sharing and connecting.

Stay tuned for Safety Fair/Sustainability Expo roadshows at other Metropolitan field facilities

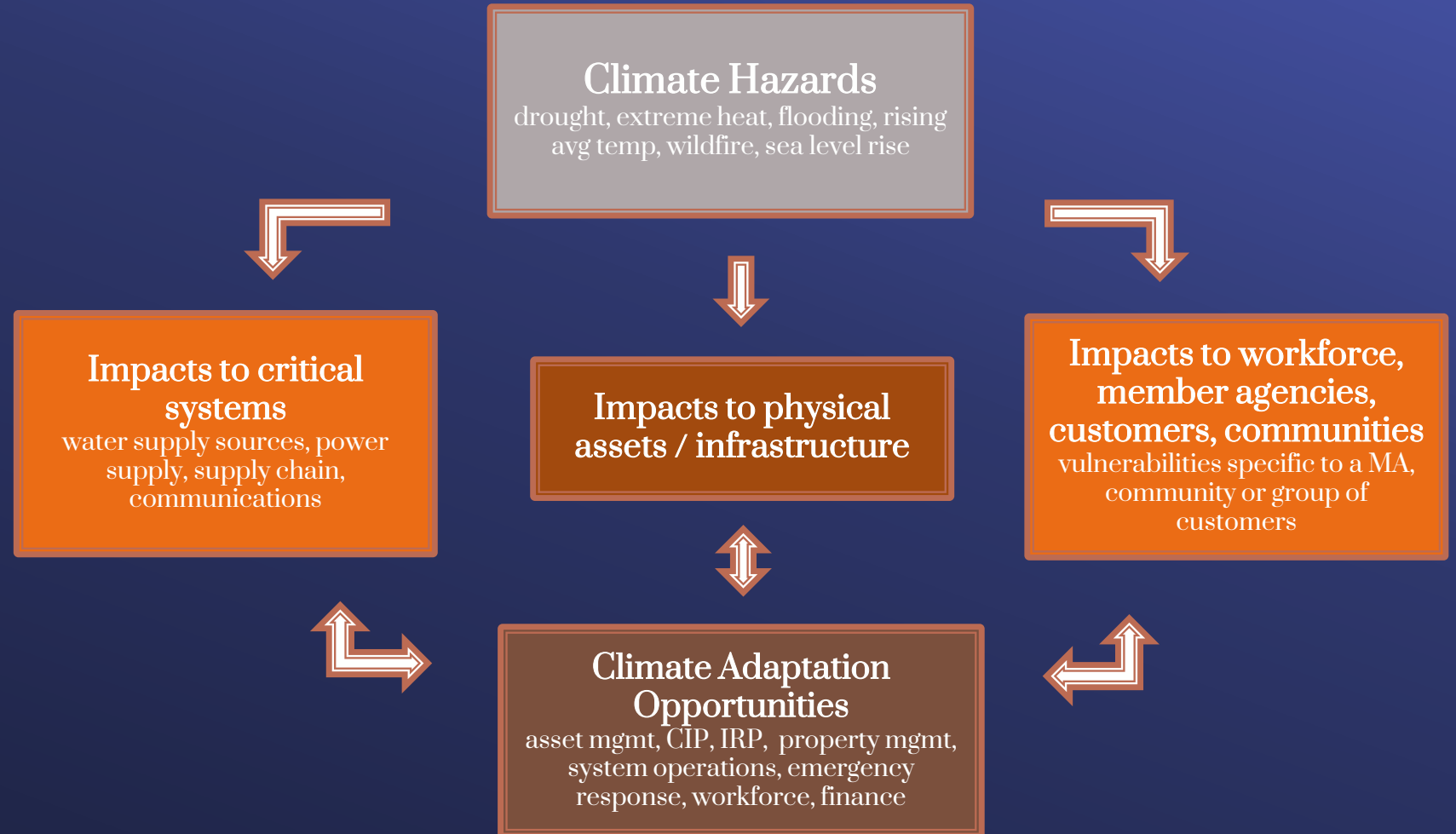
REGISTER For the Expo HERE and claim your FREE lunch



Resilience

Metropolitan's water system functions so that nature and people, including those disproportionately impacted by climate change, adapt and thrive under shocks, stresses and change

Climate Vulnerability and Risk Assessment



Eight-Month Climate Vulnerability & Risk Assessment

Resilience

Metropolitan's water system functions so that nature and people, including those disproportionately impacted by climate change, adapt and thrive under shocks, stresses and change

Gap Analysis

Dec - Feb 2023

- Review Plans
- Department Interviews
- Measure Analysis & Success Tool (MAST)

Internal Strategy

March–May 2023

- Design Charrettes
- Cascading Risks
- Identify high priority zones

Climate Resilience Tools

June-Aug 2023

- Key vulnerabilities and risks
- Mapping tool

Innovation

Metropolitan plans and prepares for the future through testing new technologies and data tracking, incorporating science, and collaboration and partnerships



Sensoil – Upper Levee Zone
Innovative Monitoring

Bay-Delta Partnership: Instrumentation and Monitoring Assessment Levee Pilot Project

Levee Monitoring Pilot

- Address existing conditions by using innovative technology
- Instrumentation and monitoring
 - Visual inspection
 - Deformation monitoring
 - Remote erosion monitoring
 - Geotechnical instrumentation and monitoring
 - Geophysical surveys of subsurface conditions



Innovation

Metropolitan plans and prepares for the future through testing new technologies and data tracking, incorporating science, and collaboration and partnerships

Request for Statements of Interest (RFSI)

- Renewable Energy and Storage Projects
- Seven Metropolitan-owned properties
- Open to concepts and innovative partnerships
- Supports Metropolitan Climate Action Plan
- Addresses power system vulnerabilities

