



WP&S Committee

R. Atwater, Chair
C. Kurtz, Vice Chair
J. Abdo
L. Ackerman
G. Cordero
D. De Jesus
L. Dick
S. Goldberg
M. Hogan
R. Lefevre
M. Luna
J. Morris
M. Petersen
G. Peterson
B. Pressman
R. Record

**Water Planning and Stewardship
Committee**

Meeting with Board of Directors *

September 13, 2021

12:30 p.m.

Live streaming is available for all board and committee meetings on our mwdh2o.com website ([Click to Access Board Meetings Page](#))

Public Comment Via Teleconference Only: Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via teleconference only. To participate call (404) 400-0335 and use Code: 9601962.

**Monday, September 13, 2021
Meeting Schedule**

09:30 a.m. - F&I
10:30 a.m. - E&O
12:30 p.m. - WP&S
02:00 p.m. - C&L
03:00 p.m. - OP&T

* 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 OTHER ITEMS -- ACTION ****

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

- A. Approval of the Minutes of the Adjourned Meeting of the Water Planning and Stewardship Committee held August 16, 2021

[21-427](#)

Attachments: [09132021 WPS 2A Minutes](#)

3. **CONSENT CALENDAR ITEMS - ACTION**

- 7-4** Express support for the 2021 California Resilience Challenge; and approve a financial sponsorship of \$200,000 to continue as a Resilience Leader and Steering Committee member; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA [21-468](#)

Attachments: [09142021 WPS 7-4 B-L.pdf](#)
[09142021 WPS 7-4 Presentation .pdf](#)

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

4. OTHER BOARD ITEMS - ACTION

None

5. BOARD INFORMATION ITEMS

- 9-2** Information on a potential seasonal land fallowing pilot program with the Quechan Indian Tribe of the Fort Yuma Indian Reservation and farmers within the Quechan Indian Unit for 2022-2023 [21-417](#)

Attachments: [09142021 WPS 9-2 B-L.pdf](#)
[09132021 WPS 9-2 Presentation.pdf](#)

- 9-3** Considerations for purchasing land which uses higher-priority Colorado River water supplies [21-418](#)

Attachments: [09142021 WPS 9-3 B-L](#)
[09142021 WPS 9-3 Presentation.pdf](#)

6. COMMITTEE ITEMS

- a.** Update on Water Surplus and Drought Management [21-449](#)

Attachments: [09132021 WPS 6a Report](#)
[09142021 WPS 6a Presentation.pdf](#)

- b.** Overview of Allocation Plan [21-464](#)

Attachments: [09142021 WPS 6b Presentation.pdf](#)

7. MANAGEMENT REPORTS

- a.** Colorado River Matters [21-448](#)

Attachments: [09132021 WPS 7a Report](#)

- b. Water Resource Management Manager's Report

[21-447](#)

Attachments: [09132021 WPS 7b Presentation.pdf](#)

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. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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

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

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

**ADJOURNED WATER PLANNING AND
STEWARDSHIP COMMITTEE**

August 16, 2021

Chair Atwater called the teleconference meeting to order at 12:30 p.m.

Members present: Chair Atwater, Vice Chair Kurtz, Directors Abdo, Ackerman, De Jesus, Dick, Goldberg, Hogan, Lefevre, Luna, Morris, Petersen, Peterson, Pressman, and Record.

Member absent: Director Cordero.

Other Board Members present: Directors Blois, Dennstedt, Erdman, Faessel, Fellow, Jung, Murray, Quinn, Ramos, Smith, Tamaribuchi, and Williams.

Committee staff present: Coffey, Hagekhalil, Hasencamp, 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))**

None

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS – ACTION

- A. Approval of the Minutes of the Water Planning and Stewardship Committee held July 12, 2021

Chair Atwater announced that Agenda item 6a would be heard ahead of 7-5, as it would provide greater context.

3. CONSENT CALENDAR ITEMS – ACTION

Brad Coffey, Manager, Water Resource Management, provided brief background information on both of Metropolitan’s imported watersheds, and on U.S. Bureau of Reclamation actions relating to the drought conditions in Lakes Mead and Powell, and he introduced Demetri Polyzos, Manager, Resource Planning Team.

6. COMMITTEE ITEMS

a. Subject: Update on Water Surplus and Drought Management

Presented by: Demetri Polyzos, Manager, Resource Planning Team,
Water Resource Management

Mr. Polyzos briefly explained an added feature to the written Water Surplus Drought Management (WSDM) report under the Supply section.

He then provided the presentation that discussed current water supply conditions and outlook of imported water from the State Water Project and Colorado River, and California's and Metropolitan's actions in response to the drought.

Brad Coffey, Deven N. Upadhyay, Assistant General Manager/ COO, and General Manager Hagekhalil responded to comments relating to budgeted and authorized amounts for Conservation Programs.

The following Directors provided comments or asked questions:

1. Lefevre
2. Petersen
3. Abdo
4. Atwater

3. CONSENT CALENDAR ITEMS – ACTION CONT'D

7-5 Subject: Adopt resolution to declare a "Condition 2 - Water Supply Alert"; 21-385 the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: Brandon Goshi, Manager, Section Manager-Water Resource Management

Motion: Adopt the proposed Water Supply Alert Resolution.

Mr. Goshi provided a presentation that reviewed and revisited the Water Supply Condition 2 framework, staff's recommendation to move into a Condition 2 Water Supply Alert, and the resolution that provides a basis for the outreach, communication, and collaboration in Metropolitan's service area.

The following Directors provided comments or asked questions:

1. Hogan
2. Abdo

- 7-6 Subject: Authorize agreement with the United States Geological Survey for \$357,000 to evaluate existing ponds on Metropolitan's Delta islands for their potential to assist in preserving Delta smelt; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA
- Presented by: Randall Neudeck, Special Project Manager, Bay Delta Initiatives
- Motion: Authorize the General Manager to enter into an agreement with USGS for up to \$357,000 for water quality and biological monitoring and assessments on Metropolitan's Delta properties.

Mr. Neudeck presented on the proposed agreement with the United States Geological Survey (USGS) to evaluate existing ponds on Metropolitan's Delta Islands for their potential to assist in preserving Delta smelt.

The following Director provided comments or asked questions:

1. Hogan

Director Lefevre made a motion, seconded by Director Kurtz to approve the consent calendar consisting of items 2A, 7-5, and 7-6.

The vote was:

Ayes: Directors Abdo, Ackerman, Atwater, De Jesus, Dick, Goldman, Hogan, Kurtz, Lefevre, Luna, Morris, Petersen, Peterson, Pressman, and Record.

Noes: None

Abstentions: None

Absent: Director Cordero

The motion passed by a vote of 15 ayes, 0 noes, 0 abstention, and 1 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

Mr. Upadhyay provided brief background information and introductory comments and introduced Bill Hasencamp.

b. Subject: Report on upcoming Colorado River negotiations

Presented by: Bill Hasencamp, Manager, Colorado River Resources

Mr. Hasencamp gave an oral report of upcoming negotiations on the Colorado River, current Colorado River conditions, the scope of the negotiations, near-term drought response actions, new Colorado River guidelines, and the negotiation process and oversight.

The following Directors provided comments or asked questions:

1. Lefevre
2. Hogan

c. Subject: Overview of Preferential Rights

Presented by: John Schlotterbeck, Sr. Deputy General Counsel

Mr. Schlotterbeck provided a detailed presentation on Preferential Rights that reviewed statutory language, purpose and intent, legislative history, historical issues, discussions and proposals, court decisions, current status, and relationship to other laws and Metropolitan's Allocation Plans

The following Directors provided comments or asked questions:

1. Hogan
2. Goldberg
3. Murray

7. MANAGEMENT REPORTS

a. Subject: Colorado River Matters

Presented by: None

Deferred in the interest of time.

b. Subject: Bay-Delta Management Report

Presented by: Steve Arakawa

Mr. Arakawa gave a brief update on Bay Delta activity that included conveyance, Department of Water Resources, and Delta operations.

c. Subject: Water Resource Management Manager's Report

Presented by: None

Deferred in the interest of time.

8. FOLLOW-UP ITEMS

Director Hogan requested a future workshop on Preferential Rights.

9. FUTURE AGENDA ITEMS

None

10. ADJOURNMENT

Next meeting will be held on September 13, 2021.

Meeting adjourned at 2:38 p.m.

Richard Atwater
Chair



- Board of Directors
Water Planning and Stewardship Committee

9/14/2021 Board Meeting

7-4

Subject

Express support for the 2021 California Resilience Challenge and approve a financial sponsorship of \$200,000 to continue as a Resilience Leader and Steering Committee member; the General Manager has determined that this action is exempt or otherwise not subject to CEQA

Executive Summary

The California Resilience Challenge (Challenge) builds resilience against increasing climate change threats through state-wide collaboration. Metropolitan helped launch the Challenge in 2019 with a \$200,000 sponsorship. The sponsorship co-funded 12 climate resiliency projects and gave Metropolitan a position on the Challenge's Steering Committee. Metropolitan has another opportunity to support the Challenge with a second \$200,000 sponsorship this year. The sponsorship would co-fund a second round of projects targeting underrepresented communities. Sponsorship would also renew Metropolitan's position on the Steering Committee.

Timing and Urgency

Staff requests approval now to enable Metropolitan to co-fund the Challenge's current Request for Proposals (RFP) for new projects and to participate in the project selection process scheduled to start this month.

Details

Background

Climate change is intensifying California's already volatile climate to greater extremes—with increasingly severe droughts, floods, heat waves, and wildfires. The extremes witnessed over just the past few years show California is experiencing climate change in real time. Many under-resourced communities in California do not have the technical, managerial, or financial resources to adapt. While California leads the country in climate change mitigation, it lacks consistent funding for climate change adaptation.

The Bay Area Council Foundation founded the Challenge with a diverse group of stakeholders in 2019 to address climate adaptation funding gaps. The Challenge aims to accelerate adaptation by funding projects to serve as case studies for other communities. Metropolitan's \$200,000 sponsorship helped launch the organization, co-funded 12 projects in 2020, and gave Metropolitan a leadership position with a seat on the Challenge's Steering Committee. **Attachment 1** lists the Challenge sponsors along with descriptions of the 2020 climate resiliency projects.

The Challenge initiated a second RFP for climate resiliency projects in 2021 (2021 RFP) and requested Metropolitan's participation. Projects funded under the 2021 RFP are required to benefit underrepresented communities while also addressing one or more of the following climate change risks:

- Drought
- Flood
- Fire
- Extreme heat

The 2021 RFP was open to public agencies, non-governmental / community-based organizations, and tribal entities. Project awards will range from \$100,000 up to a maximum of \$200,000, with close to \$2 million expected to be awarded. The RFP opened for project proposals on July 12, 2021. It closes on September 13, 2021. The Challenge plans to announce the winning projects in December 2021. **Attachment 2** summarizes the Challenge's 2021 RFP.

Staff seeks Board authorization to sponsor the Challenge with a \$200,000 contribution. If approved, the sponsorship would co-fund the 2021 RFP and renew Metropolitan's position on the Steering Committee. As a Steering Committee member, Metropolitan would participate in the project selection process. Metropolitan's sponsorship would include speaking opportunities at Challenge events along with visibility on communication materials.

If approved, the sponsorship would maintain Metropolitan's role as a leader in climate resiliency. Metropolitan co-founded the Water Utility Climate Alliance, an organization of 12 of the largest water utilities in the nation collaborating on climate change adaptation challenges. As an innovator in planning under uncertainty, Metropolitan has been considering climate change in its Integrated Resources Plan (IRP) since the early 2000s. The 2020 IRP confronts climate change resiliency directly. Participation in the Challenge gives Metropolitan a seat at the table with other climate resiliency leaders, creating opportunities for staff to collaborate with peer organizations.

Projects funded by the Challenge benefit Southern California by serving as road maps for communities contending with similar challenges. By strengthening individual communities, these projects increase the overall climate resiliency of California's interconnected water and power infrastructure.

Policy

Metropolitan Water District Administrative Code Section 11103: Participation in Projects or Programs Serving District Purposes

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51624, dated June 11, 2019, the Board authorized the General Manager to commit \$200,000 to the California Resilience Challenge and serve on the Steering Committee.

By Minute Item 44813, dated March 12, 2002, the Board adopted the proposed policy principles regarding global climate change and water resources.

By Minute Item 50358, dated January 12, 2016, the Board adopted the 2015 Integrated Water Resources Plan Update, as set forth in Agenda Item 8-3 board letter.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment. (Section 15378(b)(4) of the State of CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to sponsor the California Resiliency Challenge with a \$200,000 contribution and renew Metropolitan's seat on the Steering Committee.

Fiscal Impact: \$200,000. This item is not budgeted. Expenditures will be managed within the Water Resource Management O&M budget to accommodate this item.

Business Analysis: Allows Metropolitan to continue participating in the California Resiliency Challenge by co-funding climate adaptation projects. It also renews Metropolitan's seat on the Steering Committee. Participation in the Challenge enhances Metropolitan's status as a leader in climate resiliency planning while creating opportunities to collaborate with peer organizations.

Option #2

Take no action.

Fiscal Impact: None

Business Analysis: Metropolitan would miss an opportunity to co-fund beneficial climate resiliency projects while reducing its role as a national leader in water utility climate change adaptation.

Staff Recommendation


Option #1



Brad Coffey
Manager, Water Resource Management

9/7/2021

Date



Adel Hagekhalil
General Manager

9/8/2021

Date

Attachment 1 – Challenge Sponsors and 2020 Funded Projects

Attachment 2 – California Resilience Challenge – 2021 Request for Proposals and Timeline

Ref# wrm12682074

Challenge Sponsors and 2020 Funded Projects

Table 1. Climate Resiliency Challenge Sponsors

Sponsoring Entity	Sector	2019 Sponsor	2021 Sponsor
Alaska Airlines	Private Company	✓	
CSA Insurance Group – Automobile Association of America	Private Company		✓
JP Morgan Chase and Co.	Private Company	✓	✓
Kaiser Permanente	Private Company		✓
Metropolitan Water District of Southern California	Utility	✓	TBD
Pacific Gas and Electric	Utility	✓	✓
Resources Legacy Fund	Foundation	✓	✓
S.D. Bechtel, Jr. Foundation	Foundation	✓	
San Francisco Public Utilities Commission	Utility	✓	
Santa Clara Valley Water District	Utility	✓	✓
Southern California Edison	Utility	✓	✓
Wareham Development	Private Company		✓

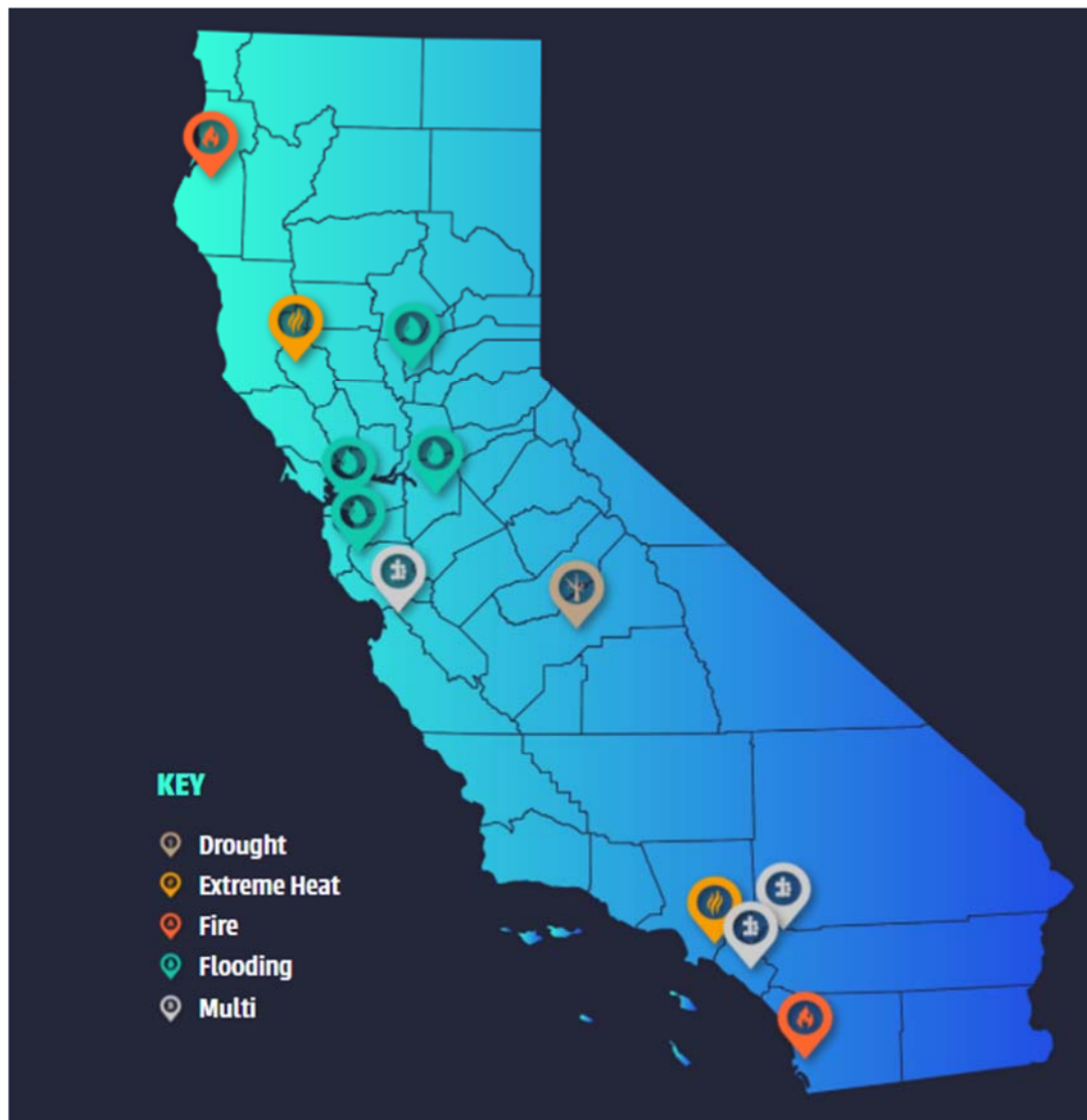
Table 2: 2020 Project Descriptions

Lead Entity	Project Description	Risk
Gateway Cities Council of Governments	In partnership with Tree People and Loyola Marymount University, Gateway Cities COG proposes to develop local Tree Canopy Assessments and Community Prioritization Reports for four municipalities in Southeast Los Angeles, in order to mitigate and reduce extreme heat.	Extreme Heat
Santa Ana Regional Transportation Center	The Santa Ana Regional Transportation Center (SARTC) is a major transportation hub for Orange County – but the facility is currently at risk of service disruption and damage during extreme climate events, including flooding and power outages due to extreme heat events. With support from the California Resilience Challenge, SARTC is conducting a microgrid feasibility study that could enable this critical facility to continue serving the community even during the most extreme climate events.	Multi-Benefit Extreme Heat Flooding
Western Riverside Council of Governments	Western Riverside Council of Governments WRCOG, in collaboration with its 19 member jurisdictions, will develop a comprehensive sub-regional Energy Resiliency Plan aimed at improving Western Riverside County’s resilience to Public Safety Power Shutoffs, power shortages and emergencies. The Plan will identify specific projects and strategies to develop independent energy sources in each jurisdiction, including back-up generators, energy storage, and development of local power microgrids.	Multi-Benefit Heat Fire
Fighting Fire with Incentives in San Diego	As climate change increases wildfire risks across California, individual homeowners can reduce community wildfire risk by creating defensible spaces and hardening their properties to make them less flammable. With support from the California Resilience Challenge, the San Diego County Office of Emergency Services is partnering with United Policyholders and local firefighters to develop a pilot mitigation certificate program to incentivize homeowners to implement fire-reduction strategies.	Fire
Resilient Groundwater in California’s Agricultural Heartland	With help from the California Resilience Challenge, the South Fork Kings Groundwater Sustainability Agency is conducting a feasibility study on an aquifer storage and recovery project to improve water-supply resilience in the face of climate change. The study	Drought

	includes a landowner survey on water use, workshops with disadvantaged communities, and pilot testing of aquifer storage and recovery techniques.	
Extreme Flooding in the Lower San Joaquin River Basin	Climate change projections predict a drastic increase in flood risk for the Lower San Joaquin River and Delta South Basin in the coming years due to rising sea levels and an increase in flows coming down the San Joaquin River. In partnership with the California Resilience Challenge, the San Joaquin Area Flood Control Agency is engaging with State, regional, and local stakeholders to develop alternatives for a coordinated basin-wide solution that addresses this increase in flood risk while also looking to achieve multiple other benefits, including improving habitat through ecosystem restoration, improving groundwater sustainability, and enhancing public recreation.	Flooding
Repairing the Gold Rush's Tarnished Legacy	Local communities in the Yuba River watershed are still grappling with the toxic legacy of the California Gold Rush, including degraded forests, meadows, and water quality. The California Resilience Challenge is helping the Yuba Water Agency quantify the economic impact of mine remediation and other restoration activities that will allow the Agency to develop long-term funding mechanisms for restoration work to increase local resilience to wildfires and drought while improving ecosystems and public health.	Multi-Benefit
Keeping Groundwater at Bay	Communities along the San Francisco Bay shoreline are preparing for rising sea levels along their respective waterfronts. However, rising sea levels also threaten to cause flooding from below by lifting groundwater tables. The California Resilience Challenge is partnering with Aquatic Science Center to support research that will help Bay Area communities better understand and plan for the effect of sea level rise on groundwater tables and critical infrastructure.	Flooding
Transforming Schools into Resilience Centers	San Mateo County is one of California's most flood-prone coastal regions. With assistance from the California Resilience Challenge, the City/County Association of Governments of San Mateo County is working with the San Carlos School District to develop plans to transform several campuses into	Flooding

	community resilience assets by using onsite stormwater capture to reduce runoff, augment local water supplies, and reduce local heat islands through increased vegetation.	
Greening the City of Watsonville	The City of Watsonville is located along the flood prone Pajaro River in the Pajaro River Watershed. With assistance from the California Resilience Challenge, Watsonville is developing a plan to integrate green infrastructure across the city's existing plans and to identify a pipeline of implementation projects that will improve flood protection along the Pajaro River, increase local water supply resilience, sequester carbon, and improve public health and well-being.	Multi-Benefit Flood Drought Heat
Resilient Communities at Clear Lake	Clear Lake has supported indigenous peoples for centuries. However, Clear Lake is experiencing significant fish die-offs and toxic algal blooms due to increased water temperatures. The California Resilience Challenge is helping the Big Valley Band of Pomo Indians expand water quality monitoring to improve public health and the recreational economy of the Clear Lake region.	Heat
High-Tech Forest Resilience	California's forests and woodlands store carbon and provide habitat to an extraordinary diversity of plants and wildlife. However, a century of fire suppression and the ongoing climate emergency have placed these forests at risk. The California Resilience Challenge is helping the Humboldt County Resource Conservation District use advanced LIDAR geospatial technology to create forest carbon inventories to improve wildfire resilience and maximize carbon sequestration.	Fire

Figure 1. Map of 2020 Climate Resiliency Projects



Climate Resilience Challenge - 2021 Request for Proposals and Timeline

Summary of Request for Proposals

RFP Element	Description
Funding	\$2.0 million total
	- Not-including Metropolitan's potential sponsorship
	\$100,000 to \$200,000 per project award
	Funding match not required
Project Requirements	Project must be in California
	Address one or more of the following climate change impacts
	<ul style="list-style-type: none"> - Drought - Flooding, including sea level rise - Fire - Extreme Heat
	Benefit an underrepresented community
Grant Eligibility	California Public Entities
	- Must partner with a Community-Based Organization
	Non-Governmental / Community-Based Organizations
	- Must serve an underrepresented community
	State agencies, commissions and interstate compacts are ineligible
Eligible Projects and Activities (partial list)	Infrastructure resiliency, feasibility studies, economic analysis
	Hazard mitigation, adaptation plans, conceptual design
	Climate vulnerability assessments, data and geospatial analysis
	Collaborative climate adaptation activities, convening stakeholders
	Projects addressing or increasing underrepresented community participation
Ineligible projects	Construction projects, design specifications, non-adaptation related
Evaluation Criteria	Benefits to underrepresented communities
	Impact and sustainability
	<ul style="list-style-type: none"> - Does it protect critical infrastructure? - Can it be replicated and scaled? - Does it lead to a viable project?
	Collaboration
	Co-benefits across multiple impacts or sectors
Term	Start by July 1, 2022
	Complete by July 31, 2024

Request for Proposal Timeline

July 12, 2021	RFP opens
September 13, 2021	RFP closes
September – October 2021	Proposal evaluations
December 2021	Awards announcements



Express Support for the 2021 California Resilience Challenge and Approve a Financial Sponsorship of \$200,000

Water Planning and Stewardship Committee

Item 7-4

September 13, 2021

Climate Extremes Threaten Our Communities



Drought

Lake Oroville
2021



Flooding

King Tide
Orange County
2020



Fire

Dixie Fire
2021



Heat

Los Angeles County
2020

California Resilience Challenge

Established in
2019

- Initiated by the Bay Area Council Foundation
- Sponsors include peer organizations

Addresses
funding gaps

- Showcase innovative approaches
- Invests in local communities

Metropolitan's
role

- Founding sponsorship of \$200,000
- Steering Committee representation
- Funded initial round of projects

2020 Climate Resiliency Projects



- 80 applicants
- 12 funded; \$2 million invested
- General Manager participated in selection process
- Four projects in service area

Southern California Projects

**Urban Tree
Canopy**
Gateway
Cities COG



**Energy
Resiliency**
Western
Riv. COG



**Energy
Resiliency**
Santa Ana
RTC



**Wildfire
Incentive
Program**
San Diego



2021 Request for Proposals

Funding

- \$2.0 million
- Awards up to \$200,000
- MWD sponsorship would fund an addition project

Eligibility

- Public entities and NGOs
- Address one or more risk
- Benefit underrepresented communities

● Timeline

Launch
Jul

Close
Sep

Review
Oct-Nov

Award
Dec

Requested Sponsorship

- Contribute \$200,000
- Opportunities
 - Participate in the 2021 RFP
 - Seat on the Steering Committee
 - Visibility on outreach materials
 - Event speaking opportunities
- 2021 sponsors



Regional Benefits

Projects help Southern California communities

- Increases resiliency of water and power grids

The Climate Resilience Challenge is leading the way

- Sponsorship enhances Metropolitan's leadership role

Opportunities to collaborate with peer organizations

- Builds on efforts with Water Utility Climate Alliance and IRP

Board Options

- Option #1
 - Authorize the General Manager to sponsor the California Resilience Challenge with a \$200,000 contribution and renew Metropolitan's seat on the Steering Committee
- Option #2
 - Take no action

Staff Recommendation

- Option #1





- Board of Directors
Water Planning and Stewardship Committee

9/14/2021 Board Meeting

9-2

Subject

Information on a potential seasonal land fallowing pilot program with the Quechan Indian Tribe of the Fort Yuma Indian Reservation and farmers within Quechan tribal land for 2022-2023

Executive Summary

Metropolitan is exploring a potential seasonal fallowing pilot program with the Quechan Indian Tribe, which would reduce water consumption in the Quechan Indian tribal land and augment Metropolitan's Colorado River supplies. The Metropolitan/Quechan Indian Tribe Seasonal Fallowing Pilot Program (Pilot) would incentivize farmers to fallow land irrigated with Colorado River water for the spring and summer months during 2022 to 2023. Farmers typically grow high-value crops in the winter (vegetable crops), followed by a lower-value, water-intensive field crop (such as Sudan grass) in the spring and summer. Participating farmers would reduce their water consumption through land fallowing of collectively up to 1,600 acres annually between the months of April and July. Metropolitan estimates a water savings of 2 acre-feet (AF) per irrigable acre. Metropolitan would enter into agreements with the Quechan Tribe and the farmers within the Quechan tribal land, and the Pilot would operate similarly to Metropolitan's Bard Seasonal Fallowing Program. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's, Metropolitan would benefit from such a Pilot, as the saved water would remain in the Colorado River and be made available for diversion. Lastly, such a pilot program would provide information that could lead to the development of a longer-term fallowing program with the Quechan Tribe.

Details

Background

The Quechan Tribe is located along the Colorado River in southeast California and southwest Arizona. The Quechan Indian tribal lands receive water from either the All-American Canal and Yuma Main Canal, groundwater wells, or directly from the Colorado River. **Attachment 1** contains a map of the Quechan tribal land in California that would participate in the potential Pilot lands. Colorado River supplies for the Quechan Indian tribal land are accounted for under the unquantified priorities within California. As such, any savings from fallowing will move through California's priority system to benefit Metropolitan.

Quechan Water Rights Settlement Agreement

In 2005, Metropolitan reached a settlement with the Quechan Tribe, the Quechan Settlement Agreement, which incentivized the Quechan Tribe to not develop and divert an additional 13,000 AF each year from the Colorado River from 2006-2034 and to not divert 20,000 AF each year beginning 2035. As part of the Quechan Settlement Agreement, Metropolitan provides an incentive to the Quechan Tribe to limit water use, resulting in stable supplies to Metropolitan. Since 2006, the Quechan Tribe has forborne diversion of nearly all of the 13,000 AF each year. Any water savings from the Pilot fallowing program would not be included in the Quechan Settlement Agreement payments.

Bard Seasonal Fallowing Program

In December 2019, Metropolitan's Board authorized a six-year Metropolitan/Bard Seasonal Fallowing Program with Bard Water District. Metropolitan currently provides incentives to farmers within the Bard Unit to fallow up

to 3,000 irrigable acres from April to July. In 2020, farmers fallowed approximately 2,750 acres with an estimated water savings of 6,075 AF. In 2021, farmers fallowed about 2,940 acres with a water savings of 6,490 AF. Since the inception of the Bard Seasonal Fallowing Program, Metropolitan has provided about \$2.6 million to Bard and the farmers, including \$30,000 for direct program costs and system improvements for an average water cost of \$207/AF. The potential seasonal fallowing pilot program with the Quechan Tribe would be structured and operated similarly to the Bard Seasonal Fallowing Program.

Potential Seasonal Fallowing Pilot Program

Metropolitan staff, in coordination with the Quechan Tribe, is developing a potential two-year seasonal fallowing pilot program. The Pilot would both evaluate farmer interest in fallowing and the amount of water saved from fallowing in the Quechan Indian tribal land. Metropolitan staff and the Quechan Tribe are developing terms to fallow a maximum of 1,600 acres each year within the tribal land, with an estimated water savings of 2 AF per irrigable acre. Under the potential Pilot, Metropolitan would provide incentives to the fallowed land during the period between April 1 and July 31, beginning in year 2022 and ending in year 2023. By December 31, 2021, Metropolitan would make a two-year fallowing call of 1,600 acres to be fallowed in 2022 and 2023 for the Pilot. Metropolitan would enter into a Pilot agreement with the Quechan Tribe to hold the delivery of water to the fallowed acres, as well as enter into agreements with each individual farmer (with property owner consent).

In order to qualify for the Pilot, the farmer must have actively farmed or participated in a previous fallowing program during three of the past five years, and must exclude areas that are used for roads, ditches and canals, and buildings. The eligible lands would also need to have access to a canal, direct-from-river pumping, or a groundwater well (the U.S. Bureau of Reclamation considers wells within the Pilot as diversions of Colorado River water). The agreement would also require the farmers to take appropriate actions to ensure that the fallowed lands do not degrade or cause dust issues. Further, farmers must allow representatives from Metropolitan and the U.S. Bureau of Reclamation to inspect the fallowed lands.

Metropolitan would provide an annual incentive of \$473.10 per acre of irrigable land fallowed, or the equivalent incentive amount to be provided under the Bard Seasonal Fallowing Program in year 2022. The agreement would provide for escalating the incentive every year using the Consumer Price Index for Southern California. Of the total fallowing payment made each year, Metropolitan would pay 75 percent of the incentive to the participating farmers and 25 percent to the Quechan Tribe. The Quechan Tribe would receive an additional payment of \$15,000 each year for direct and indirect costs related to its administration of the Pilot. Metropolitan would make payments in two installments, the first half at the beginning of the fallowing period and the second half at the end of the fallowing period.

Policy

By Minute Item 42820, dated February 10, 1998, the Board approved the policy principle in the Colorado River Resources Strategy supporting Metropolitan's interests in increasing its dependable entitlements to Colorado River water, while collaborating with other California Colorado River agencies.

By Minute Item 51833, dated December 10, 2019, the Board authorized the General Manager to enter into a Program agreement with Bard Water District and seasonal fallowing agreements with farmers within the Bard Unit, and approve payment of up to \$1.4 million per year, escalated annually through 2026.

Fiscal Impact


A projected fiscal impact of \$1.6 million for Fiscal Years 2021/2022 and 2022/2023 is anticipated to be incurred following board authorization of the potential pilot program. Funds for Fiscal Year 2021/2022 are available within the Water Supply Budget.



Brad Coffey
Manager, Water Resource Management

9/2/2021

Date



Adel Hagekhalil
General Manager

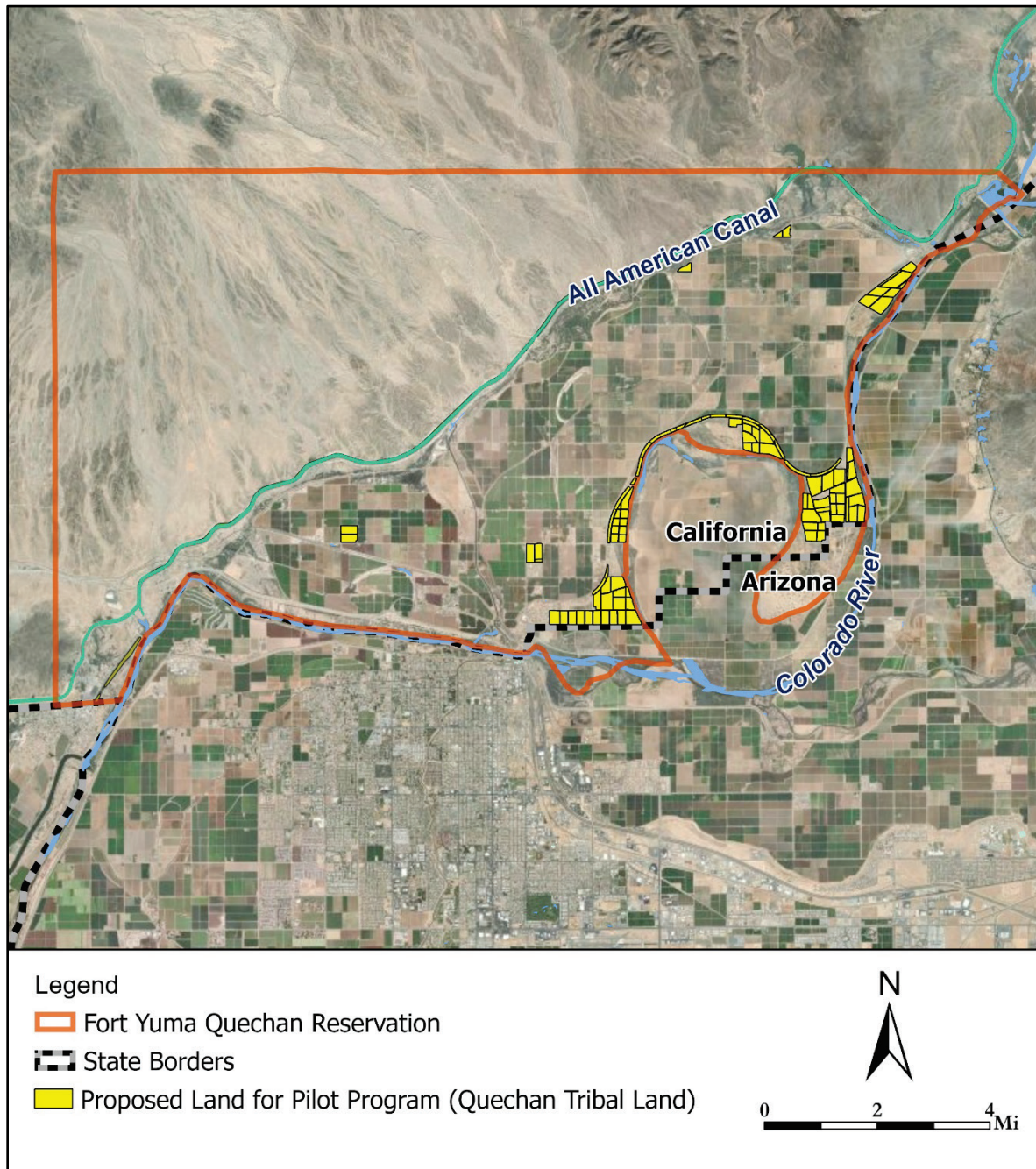
9/2/2021

Date

Attachment 1 – Map of Proposed Tribal Land for Potential Metropolitan/Quechan Seasonal Fallowing Pilot Program

Ref# wrm12684668

**MAP OF PROPOSED TRIBAL LAND FOR POTENTIAL METROPOLITAN/QUECHAN
SEASONAL FALLOWING PILOT PROGRAM**





Information on Potential Metropolitan/Quechan Indian Tribe Seasonal Fallowing Pilot Program

Water Planning and Stewardship Committee

Item 9-2

September 13, 2021

Agenda

- Background
- Potential Metropolitan/Quechan Indian Tribe Seasonal Following Pilot Program

Background

Quechan (Kwatsáan) Indian Tribe of the Fort Yuma Indian Reservation

- Constitutes the Reservation Division of the Yuma Project, along with Bard Water District
- Parcels irrigated through the All-American Canal, Yuma Main Canal, groundwater wells, or directly from the Colorado River
- Crops grown:
 - Winter: High-value vegetables
 - Spring/Summer: Lower-value, water-intensive grasses



Colorado River Water Priorities Quantification Settlement Agreement

Agency	Million Acre-feet
PVID	0.42 (Average)
Yuma Project	
IID	3.10
CVWD	0.33
MWD*	0.55
Total	4.40

**Amount fluctuates based on PVID/Yuma Project use, unused IID and CVWD water*

- Water made available to Metropolitan under this program would not affect existing rights in the Colorado River

Quechan Water Rights Settlement Agreement

- Settlement reached between Metropolitan and Quechan in 2005
- Metropolitan provides incentives to the Tribe to limit water use from the Colorado River
 - Provides stable supplies to Metropolitan
- Incentivizes Tribe to not develop and divert an additional:
 - 13,000 AF each year from 2006-2034
 - Since inception, Tribe has forborne diversion of nearly all 13,000 AF each year
 - 20,000 AF each year beginning 2035
- Settlement payments would be delineated from any water savings from potential Pilot

Metropolitan/Bard Seasonal Fallowing Program

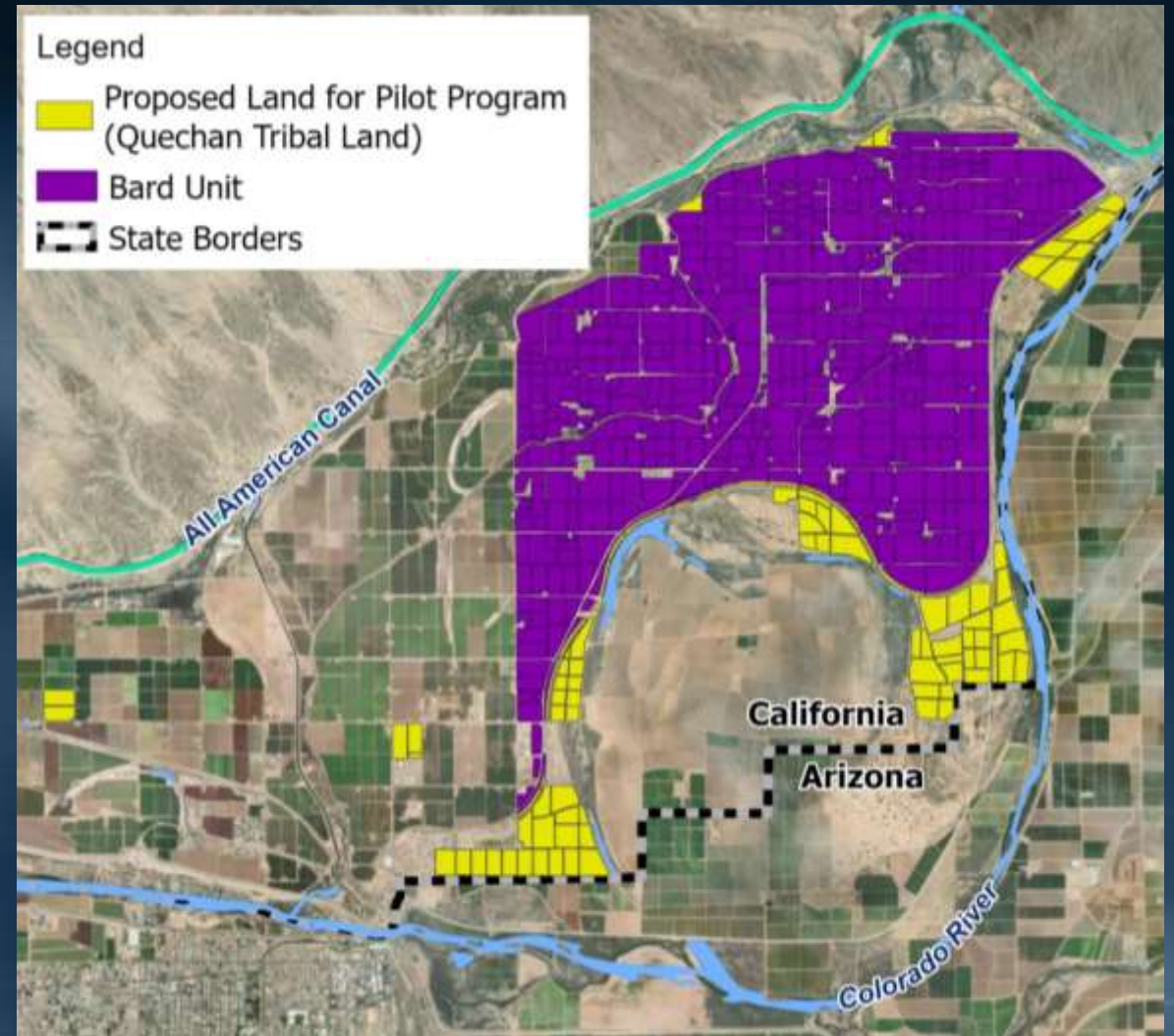
- Authorized by Board in December 2019
- Fallowing occurs April to July, 2020-2026
- Max enrollment of 3,000 irrigable acres each year
- Completed fallowing seasons:
 - 2020: 2,750 acres
 - Est. water savings: 6,075 acre-feet
 - 2021: 2,940 acres
 - Est. water savings: 6,490 acre-feet.
- Metropolitan payments
 - \$1.4 million, escalated annually
 - Avg. water cost: \$207/AF



Potential Metropolitan/Quechan Indian Tribe Seasonal Following Pilot Program

Purpose of Potential Pilot Program

- Evaluate the water savings of fallowing within the Tribal land
- Evaluate water available to Metropolitan from fallowing
- Determine farmer interest
 - **Voluntary participation**
- Explore the possibility of a long-term seasonal fallowing program with the Tribe



Key Elements of Potential Pilot Program

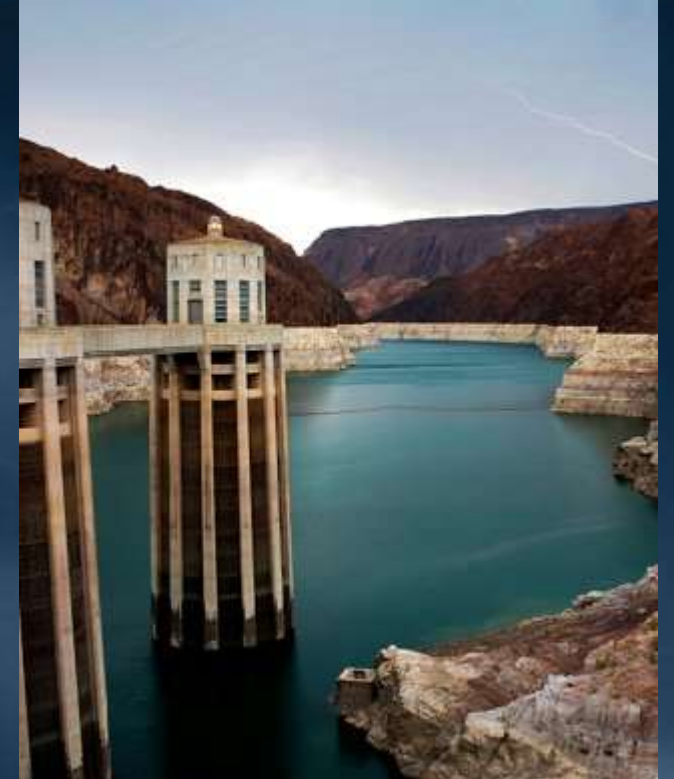
- Two following seasons: April to July, 2022-2023
 - Metropolitan would issue two-year following call by December 31, 2021
- Maximum enrollment of 1,600 irrigable acres each following season
- Participation on first-come, first-served basis
- Eligible parcels must have:
 - Recent history of farming or participation in following program
 - Access to a canal, direct-from-river pumping, or groundwater well
- Program agreement with Tribe and following agreements with farmers

Potential Pilot Program Costs

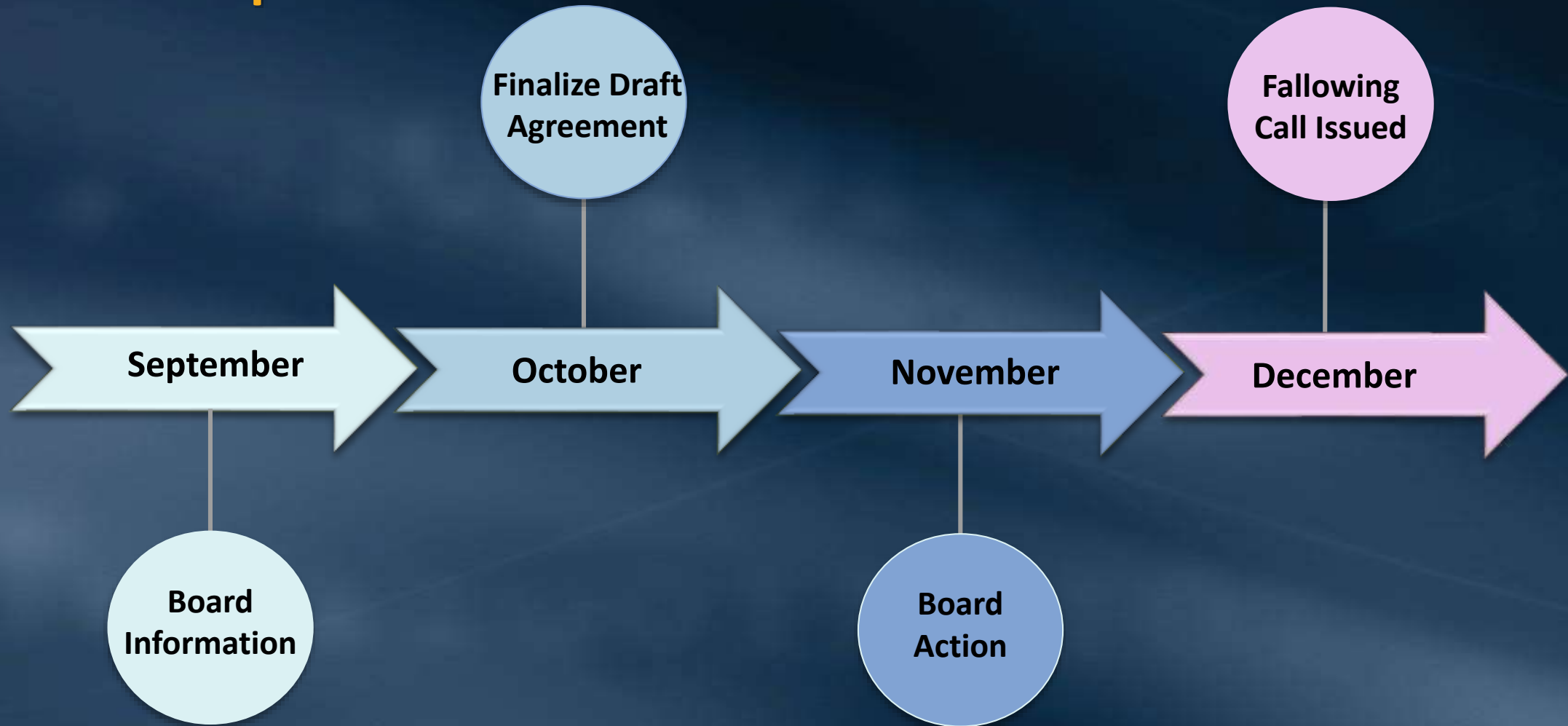
- Approx. \$473.10 per acre per year of fallowed irrigable land, escalated annually
 - 75% paid to farmer
 - 25% paid to Tribe
- Tribe payment of \$15,000 per year fallowed
 - Direct program costs and improvements
- Payments made in two installments following verification of fallowing
- Total payment costs for potential Pilot: \$1.6 million
 - Estimated unit cost: \$226.25/AF

Potential Pilot Program Benefits

- Expanding partnership between Metropolitan and Tribe
- Metropolitan Water District
 - Water saved through fallowing is available to Metropolitan
 - Est. water savings of 2.0 AF/acre of land fallowed
 - Opportunity for long-term program
- Quechan Tribe
 - Payments to farmers and Tribe
 - Payment to Tribe for system improvements
 - Opportunity for long-term program



Next Steps







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

9/14/2021 Board Meeting

9-3

Subject

Considerations for purchasing land assigned senior priority Colorado River water supplies

Executive Summary

Metropolitan has a strong interest in promoting the long-term health of the Colorado River and the vital communities and economic activity which depend on its flow. For decades, Metropolitan has taken actions to conserve Colorado River supplies, which flow through the river's priority system for use by Metropolitan. These actions included establishing a 35-year rotational fallowing program with Palo Verde Irrigation District (PVID) landowners and providing rent reduction incentives to decrease water consumption on Metropolitan-owned land. To date, Metropolitan owns a total of 29,126 acres of land with Priority 1 and 3 rights within the Palo Verde region. Moving forward, staff seeks Board input to guide future potential land acquisitions, including the purchase of additional lands in either the Palo Verde Valley or other regions with rights to higher priority Colorado River supplies. This informational report focuses on the history and considerations for purchasing and leasing land holdings in the Palo Verde region.

Details

Background

For decades, the purchase of land to acquire water or water rights has increased in the western United States. From time to time, opportunities are brought to Metropolitan to purchase additional lands that use Colorado River water for the potential purpose of incentivizing water conservation on that land. Metropolitan has Priority 4 water rights to the Colorado River, and acquiring lands with senior priority rights is a potential strategy to obtain reliable and cost-effective water supplies in the face of a changing climate and reduced water supplies.

The Law of the River and the Quantification Settlement Agreement

Water rights in the Colorado River are governed by a set of statutes, interstate compacts, court decrees, and regulations collectively known as "the Law of the River." Under the Law of the River, California has a basic apportionment of 4.4 million acre-feet per year plus one-half of any surplus water available to the Lower Basin states made up of California, Arizona, and Nevada. In addition, California may make use of any unused water apportionments of the other two lower basin states.

In California, the 1931 Seven Party Agreement established the state's Colorado River water apportionment to each agency by priority status. This apportionment was incorporated in the water delivery contracts for each agency. The agricultural agencies with senior priority over Metropolitan have the right to use up to 3,850,000 acre-feet per year. The highest California priority under the 1931 Seven Party Agreement is held by PVID for the irrigation of land in the Palo Verde Valley. Table 1 sets forth the existing priorities of the California users of Colorado River water established under the 1931 Seven-Party Agreement.

Table 1

PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT⁽¹⁾

Priority	Description	Acre-Feet Annually
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	3,850,000
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys ⁽²⁾ to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	SUBTOTAL	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain ⁽³⁾	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	300,000
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
	TOTAL	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: Metropolitan.

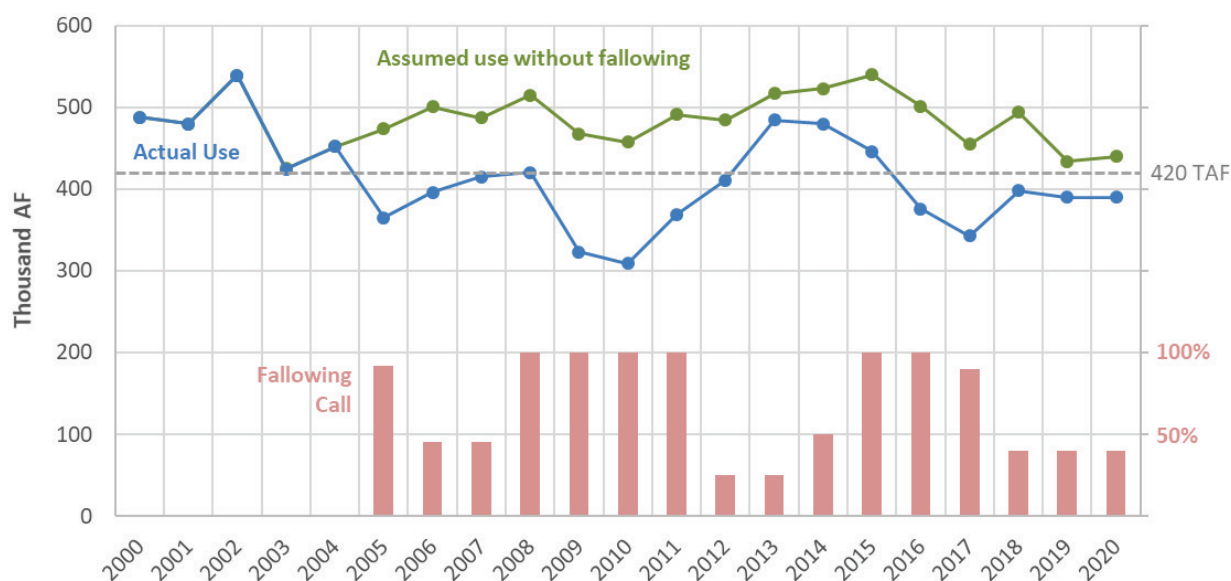
- (1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.
- (2) The Coachella Valley Water District serves Coachella Valley.
- (3) In 1946, the City of San Diego, the San Diego County Water Authority, Metropolitan and the Secretary of the Interior entered into a contract that merged and added the City and County of San Diego's rights to storage and delivery of Colorado River water to the rights of Metropolitan.

The 2003 Quantification Settlement Agreement (QSA) established a limit on the use of Colorado River water by Imperial Irrigation District (IID) and Coachella Valley Water District (CVWD). However, PVID is not a party to the QSA; therefore, its Colorado River water rights are not quantified. The terms of the QSA provide that Metropolitan is responsible for any use by PVID and the Yuma Project that exceeds 420,000 acre-feet per year and, conversely, will receive any balance when PVID and the Yuma Project use less than that amount.

Figure 1 shows the net use of Colorado River water by PVID and the Yuma Project compared to their QSA baseline use of 420,000 acre-feet per year. When the higher priority annual water use exceeded 420,000 acre-feet, that amount came out of Metropolitan's supplies. Nevertheless, any volume of water saved from the fallowing program is made available to Metropolitan in accordance with the QSA. These actions help achieve an Integrated Water Resource Plan (IRP) goal of being able to run the Colorado River Aqueduct at full capacity, when needed.

Until 2003, Metropolitan diverted more than its base 5a priority allocation of the California apportionment by taking advantage of the unused apportionments of Arizona and Nevada and any surplus water. In recent years, however, those states have taken their full Colorado River apportionments due to drought, which has also limited the availability of surplus water. As a result, Metropolitan has sought to make the most efficient use of California's share of Colorado River water supplies, including providing funding for water conservation by the California agricultural agencies. By helping to reduce water consumption of higher priority users, Metropolitan increases the amount of Colorado River supplies available to it under its Priority 4 rights. In addition, Metropolitan incentivizes conservation by its own member agencies and others throughout its service area.

Figure 1. Following has reduced Priority 1, 2, 3b water use



Palo Verde Valley

Acquiring land for a water supply from the Palo Verde valley first occurred with the 1975 Sun Desert Agreement, approved by the Secretary of the Interior and California's Colorado River contractors. Under this agreement, San Diego Gas and Electric Company (SDG&E) purchased over 9,000 acres in PVID to provide cooling water for the proposed Sun Desert nuclear power plant. However, because of concerns about the permanent retirement of land in the valley, SDG&E purchased two acres for every acre to be taken out of production for a water supply. To make an annual flow of water available to the power plant, SDG&E planned to rotate land each year with half of its landholdings out of production and half under lease to farm operators.

In 2001, Metropolitan acquired approximately 16,344 gross acres from Sempra Energy, the eventual corporate parent of SDG&E, for about \$2,600 per acre. Of this acreage, 9,704 acres were in the valley, and 6,640 acres were undeveloped acreage located outside the PVID boundaries on the mesa; this mesa acreage remains undeveloped. Ownership of some of the valley's Priority 1 property provides Metropolitan with a basis for implementing water conservation measures and allows Metropolitan greater flexibility to implement various water conservation and related efficiency management programs.

In 2015, Metropolitan acquired approximately 12,782 acres from Verbena LLC for about \$20,000 per acre. Verbena initially proposed to Metropolitan that it would take the lands out of production if Metropolitan would agree to exchange the conserved water for State Water Project supplies to be delivered to contractors in the San Joaquin Valley. Metropolitan declined this offer, at which point Verbena offered to sell. By purchasing the land, Metropolitan could then work with existing tenants to reduce consumptive water use while keeping the lands under production as active farmland. With this purchase, Metropolitan became the largest landowner in the Palo Verde region.

Palo Verde Land Management, Crop Rotation and Water Supply Program (fallowing program)

Under the 35-year term fallowing program, Metropolitan made an initial payment of \$3,170 per acre to farmers who agreed to fallow a portion of their lands each year during the 35-year term of the program. In addition, Metropolitan annually pays landowners for each acre of land fallowed at Metropolitan's call. The fallowing payment for 2021 is \$909 per acre. This rate escalates each year depending on inflation.

The program generates up to 110,000 acre-feet in a year when the program operates at full capacity (the program is limited to maximum fallowing of 29 percent of irrigated lands in the Palo Verde Valley). The actual amount of conserved water, and the cost to Metropolitan, varies depending on the fallowing calls during the program term. The present value of the unit cost to Metropolitan for the conserved water (including the initial payment) is estimated to range from \$134 to \$147 per acre-foot depending on the amount of fallowing called for over the term of the program (the range is based on projected future fallowing calls of 90 percent and 25 percent, respectively).

Objectives for Leasing of Metropolitan-Owned Lands in the Palo Verde Region

Metropolitan began leasing most of its acquired property since the initial purchase in 2001. Metropolitan and PVID entered a memorandum-of-understanding (MOU) in 2001, which established an ongoing Property Utilization Committee for Metropolitan and PVID to discuss, analyze, and review Metropolitan's actions regarding the property.

Metropolitan's first lease structures were relatively simple and charged a market-based rent which was discounted because of the requirement that the lessees fallow land consistent with the fallowing program terms. These initial leases did not contain rent structures to incentivize water conservation. When new leases were later established, a rent structure was used that incentivized (or penalized) tenants based on variation from an agreed-upon baseline water use. This rent structure was later modified because of the difficulty in measuring applied water use with existing infrastructure and because of the heavy penalties for water use above the baseline. The next versions of the lease structures emphasized rent discounts based on crop choices, with lower rents for cropping patterns that were expected to lower consumptive water use. A land management credit was also added to these leases in recognition of the need to maintain any land that became fallowed on the leased land through the fallowing program.

Through these lessons learned with the tenants, staff identified several management objectives in 2016 to guide the leasing of Metropolitan-owned lands in the Palo Verde region. These objectives, updated since, guided the development of existing lease terms.

- **Reduce consumptive water use on the land** by incentivizing less water-intensive crops or more efficient irrigation methods. Reducing consumptive water use increases Colorado River supplies available to Metropolitan through the priority system.
- **Maintain a vibrant agricultural economy in the Palo Verde Valley** by maintaining the lands as productive farmland and providing farmers flexibility to respond to market forces in their choice of crops and irrigation methods.
- **Promote community acceptance and participation** by creating a fair and transparent process for lease selection and soliciting input from the community.
- **Advance state-of-the-art farming techniques** by encouraging innovative irrigation methods, crop selection, and data collection that can serve as a model.
- **Keep administrative overhead low** by limiting the total number of leases to be administered.
- **Provide a positive revenue stream for Metropolitan** by generating rents and reflecting a balance between the value of the agricultural land and the unique lease conditions in place to achieve these objectives.

These leasing objectives have proved effective thus far. Metropolitan's leased lands in the Palo Verde region, while controlling for variables in fallowing—produce a crop mix using less water per acre on average compared to the rest of the Palo Verde region. For example, the average water use on Metropolitan-leased lands from 2017-2020 was 8.2 AF/acre, compared to the valley average of 8.6 AF/acre. Reduced water use results from a broad range of Metropolitan's incentives and creative measures for conservation, which are developed and implemented by the farmers, such as improved irrigation efficiency, crop selection, crop stressing, and the like. If additional land was purchased in the Palo Verde Valley, Metropolitan would receive Colorado River water supply

benefits because lands could be managed under the existing fallowing program or leased with goals to save water which would be managed through the Colorado River priority system.

Considerations for Purchasing Additional Lands receiving Senior Priority Colorado River Water Supplies

Similar to the guidance authorized by the Board for lease management objectives for land already owned by Metropolitan, staff seeks guidance on future potential land acquisitions, including the purchase of additional lands in either the Palo Verde Valley or other regions with rights to higher priority Colorado River supplies. As a matter of practice, Metropolitan regularly reviews publicly listed land, but has not actively pursued land purchases in the Palo Verde region. Metropolitan is occasionally approached by sellers desiring to sell their lands. Metropolitan's past practice to begin negotiations with these sellers have considered the following factors:

- **Overall location and use of Priority 1 water.** Consistent with the objective to conserve Colorado River supplies, bundled properties with adequate proportions of Priority 1 water rights are more desirable.
- **Water toll acreage.** Properties with a higher proportion of water toll acres increase water savings opportunities.
- **Adjacency/contiguity to existing Metropolitan properties.** Lands which are contiguous or adjacent to existing properties improve farming efficiencies, reduce land management overhead, and improve desirability for potential tenants.
- **Asking price.** The asking price should consider the appraised value range, market conditions, soil quality, encumbrances, and existing irrigation infrastructure. The appraised value may not fully reflect Metropolitan's strategic needs for the property. As such, appraised value is just one piece of information informing the purchase price.
- **Potential tenants.** Sale and leasebacks are considered with respect to the tenant's farming experience, financial viability and creditworthiness, proposed rent and agricultural innovation.
- **Fallowing Program enrollment.** Purchasing lands which are currently enrolled in a fallowing program would reduce year-to-year costs of normal fallowing payments.

Moving forward, other considerations for land purchases in the Palo Verde region may be:

- **Potential water supply benefits.** Consider purchases only when conserved water can be assured to flow to Metropolitan through the priority system or through creation of Intentionally Created Surplus (ICS) credits.
- **Buy and lease for the long-term.** While the current fallowing program will eventually end in 2040, Metropolitan's lands are a long-term investment providing a durable supply of water and other benefits for decades to come. The ability to lease farmland for decades allows long-term partnerships to improve irrigation infrastructure, manage soil health, and balance market-based lease structures with water management flexibility. Over time, lease revenues will recover the purchase cost of the land.
- **Community investment.** Land ownership and leasing back to farmers promotes a long-term investment in a vibrant community dependent on agricultural production. Metropolitan's past \$6 million investment in a Community Improvement Fund in Palo Verde Valley can also serve as a model to create and retain local jobs.
- **Building partners for Colorado sustainability.** Land ownership attracts other funding and innovation partners to support the long-term health of the Colorado River system. For example, the recent partnership among the U.S. Bureau of Reclamation, Central Arizona Project, Southern Nevada Water Authority, Metropolitan, and PVID is fallowing land enrolled in the fallowing program and on Metropolitan-owned property.

Funding for Past Land Purchases in the Palo Verde Region

In July 2015, after the adoption of the biennial budget, the Board approved the purchase of land and associated transactional costs in Palo Verde Valley for up to \$264 million. This purchase was funded wholly from reserves, given that the purchase had not been included in budgeted revenues. Future property acquisitions can be treated in an Ad Hoc manner, which would likely result in reserve funds being used. However, alternative approaches can also be considered along with the considerations listed above.

Next Steps

Staff seeks board guidance on the following:

- (1) Considerations for purchasing land receiving Senior Priority Colorado River Water Supplies
- (2) Considerations for actively pursuing land or responding to unsolicited offers, and funding such acquisitions, if they arise

Based on the Board's feedback, staff can develop proposed policy guidelines for Board consideration.

Policy

By Minute Item 41222, dated January 10, 1995, the Board adopted a policy that Metropolitan continue to seek ways to increase the reliability of its Colorado River supplies in order to operate the Colorado River Aqueduct at capacity as much of the time as is feasible.

By Minute Item 42820, dated February 10, 1998, the Board approved the policy principle on Colorado River Resources Strategy supporting Metropolitan's interests and increasing its dependable entitlements to Colorado River water, while collaborating with other California Colorado River agencies.

By Minute Item 44542, dated July 10, 2001, the Board approved Principles of Agreement for a Land Management, Crop Rotation, and Water Supply Program with Palo Verde Irrigation District.


By Minute Item 45053, dated October 22, 2002, the Board authorized entering into agreements for the Palo Verde Irrigation District Land Management, Crop Rotation, and Water Supply Program and community improvement programs.

By Minute Item 45517, dated September 23, 2003, the Board approved the QSA and related agreements among Imperial Irrigation District, Coachella Valley Water District, San Diego County Water Authority, and Metropolitan. Under the QSA, Metropolitan could acquire Colorado River water from PVID during the Quantification period without objection by IID and/or CVWD.

By Minute Item 50446, dated April 12, 2016, the Board authorized authorize staff to negotiate new leases with HayDay Farms and River Valley Ranches, with lease terms to meet the objectives stated in the board letter for consumptive water use and positive revenue, and pursue leasing the remaining Metropolitan-owned lands through a generalized request for proposals process.

Fiscal Impact

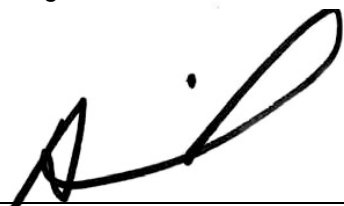
There are no fiscal impacts as no action is being proposed at this time. Future actions may yield revenue in the form of rent and reduce costs for additional Colorado River supply.



Brad Coffey
Manager, Water Resource Management

9/2/2021

Date



Adel Hagekhalil
General Manager

9/2/2021

Date



Considerations for Purchasing Land Which Uses Higher-Priority Colorado River Water Supplies

Water Planning and Stewardship Committee

Item 9-3

September 13, 2021

Outline

- Background and Need for Water Savings
- Methods of Saving Water in Senior Priority Agricultural Areas
 - Following
 - MWD Land Ownership
- Policy Considerations
- Board Feedback

Background – Colorado River Senior Priority Areas



Quantification Settlement Agreement (2003)

Priority		Thousand Acre-Feet
1 & 3b	Palo Verde Irrigation District	~420 (uncapped)
2	Yuma Project	
3a	Imperial Irrigation District	3,100
3a	Coachella Valley Water District	330
4	Metropolitan Water District	550
California Total		4,400

Methods to reduce uncapped Senior Priority water use

Fallowing

- Palo Verde Irrigation District Fallowing Program
- Bard Water District Seasonal Fallowing Program

Land Ownership

- Metropolitan lands are enrolled in Fallowing Program
- Exploring incentives to reduce water use
- Partnering on alternative agricultural practices

Following

Fallowing - Palo Verde Irrigation District

Senior priority Colorado River rights (1 & 3b)

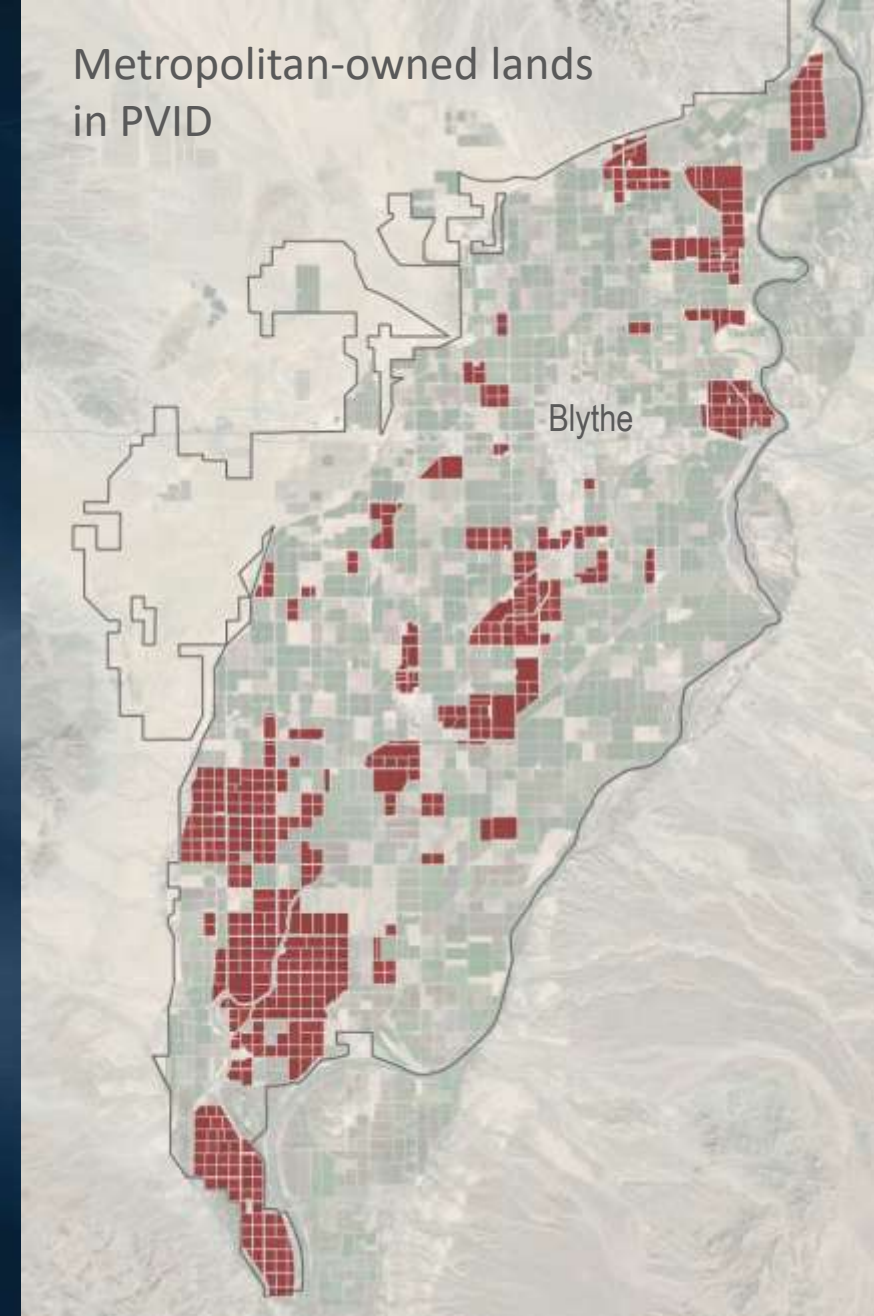
Metropolitan-PVID Fallowing Program

- Fallow up to 25,947 acres of land
- Save up to 120,000 AF of water per year

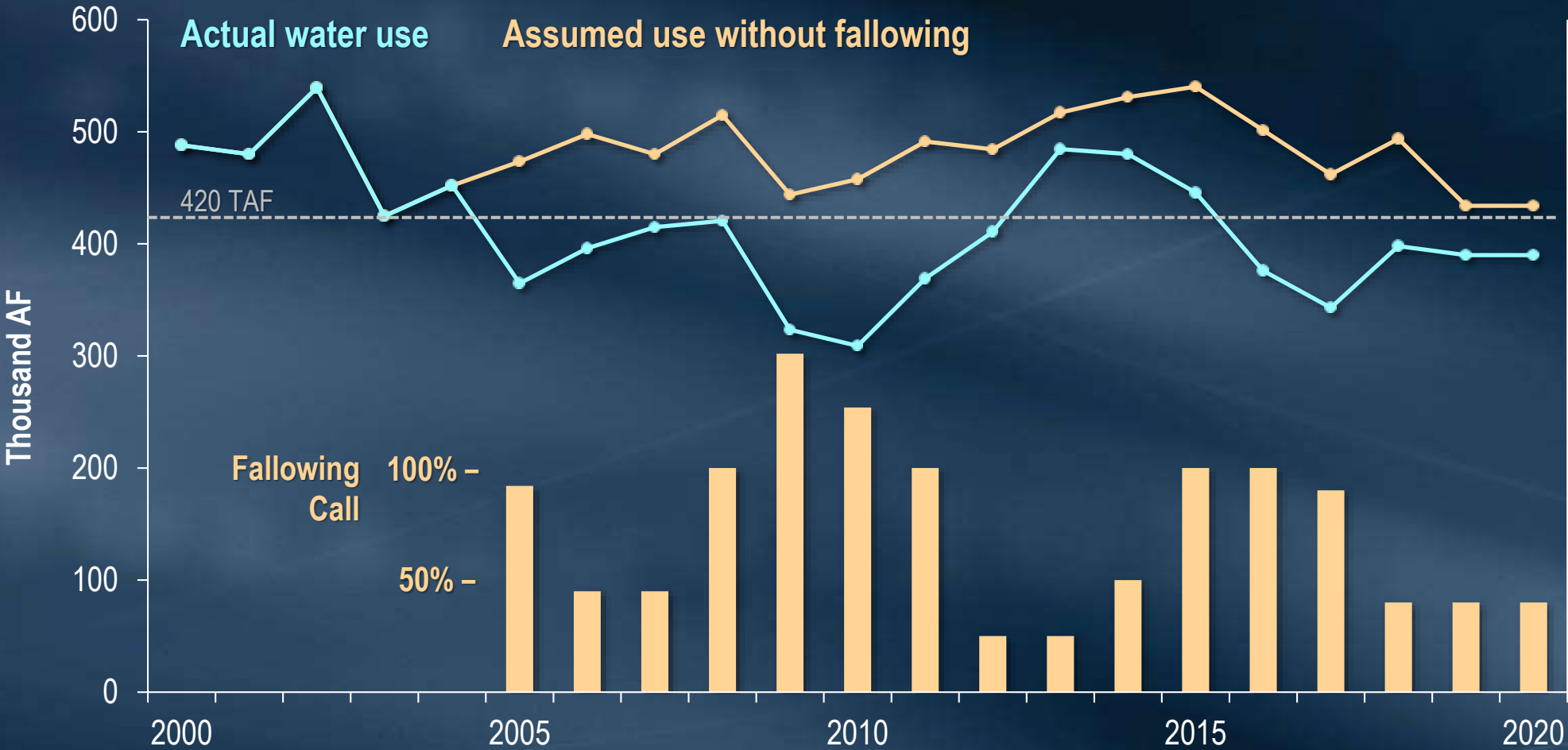
Metropolitan owns 29,126 acres of land in and around PVID

- Single largest landowner in PVID
- 7,311 acres enrolled in fallowing program

Metropolitan-owned lands
in PVID



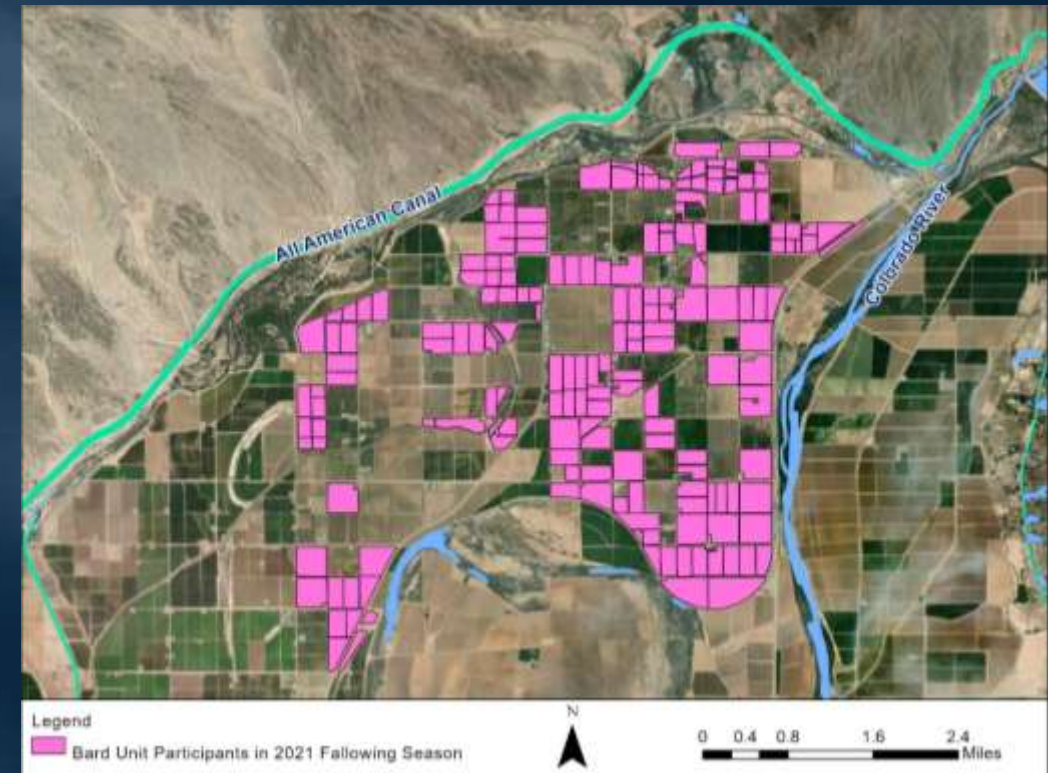
PVID following reduces Priority 1 & 3b water use



Bard Water District Fallowing Reduces Priority 2 Water Use

Metropolitan-Bard Seasonal Fallowing Program

- Fallow up to 3,000 acres per year
- Fallow for four months in Spring/Summer
- 6,000 AF per year saved



Land Ownership

History of purchasing land to save Colorado River water

- 1975 SDG&E purchased land in Palo Verde Valley to provide water for proposed nuclear power plant
- 2001 MWD purchased 16,344 acres in PVID from Sempra (SDG&E) to enroll in planned fallowing program
- 2003 Quantification Settlement Agreement was signed, settling priorities to meet California's 4.4 MAF diversion target
- 2005 PVID-MWD Fallowing Program began – MWD-owned lands enrolled
- 2015 MWD purchased 12,782 acres in PVID from Verbena LLC



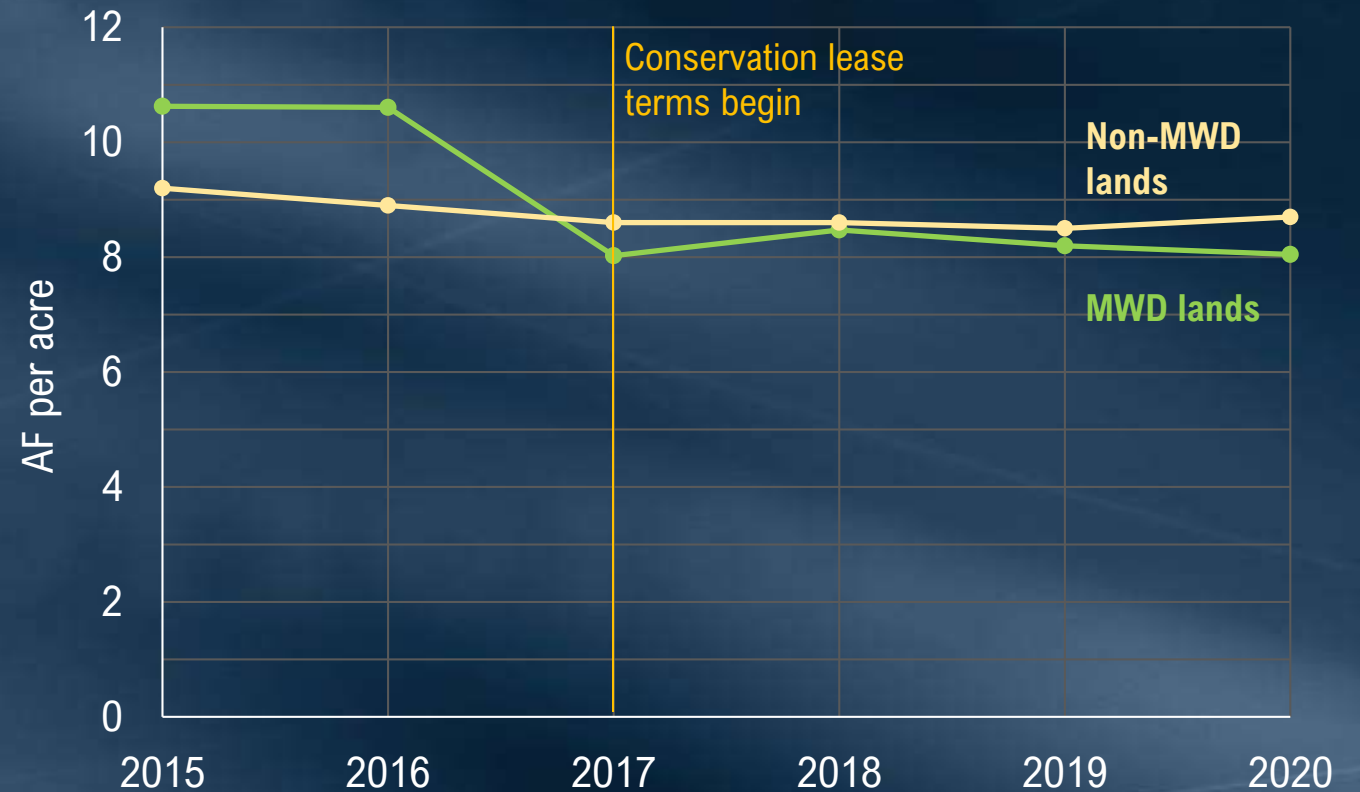
History of Metropolitan leases in PVID

- 2001 MWD assumed existing leases from SDG&E
- 2005 PVID-MWD Fallowing Program began – MWD-owned lands were also enrolled
- 2015 - 17 As lessor, MWD solicited new lessees and included water savings incentives in lease terms
- 2021 MWD is negotiating to extend leases and maintain water saving initiatives

Innovative lease structures conserve water

- Farmers on MWD-owned land apply less water per acre than average PVID water use
- Lease structures adapted over time

Applied water use on MWD vs. non-MWD lands in PVID



Policy Considerations

Considerations for MWD agricultural land ownership

- Potential water supply benefits
- Ownership and leasing for the long-term
- Allows for community investment and support
- Creates opportunities for partnerships to improve Colorado River sustainability

Specific considerations for land purchases

- Location and use of senior-priority water
- Acreage, price, desirability, adjacency to existing properties
- Potential water supply benefits
- Methods for funding land purchases
 - Replacement and Reimbursement Fund
 - Unrestricted reserves
 - Capital financing to fund assets with long useful lives

Next Steps

Staff seeks board input on the following:

- Considerations for purchasing land in the senior priority areas
- Direction to actively pursue land or to only respond to unsolicited offers
- Options for funding land purchases





• Water Surplus and Drought Management Update *Conditions as of 8/30/2021*

Summary

This report provides an accounting of water supply, demand, and storage conditions for calendar year (CY) 2021 and an outlook for Metropolitan's imported supplies for 2022. This report considers conditions as of August 30, 2021.

The current demand estimate is 1.79 million acre-feet. Given the current 5 percent State Water Project (SWP) allocation and the Colorado River Aqueduct (CRA) supply estimate, the supply/demand gap is estimated to be 652 thousand acre-feet. To satisfy the supply/demand gap, Metropolitan is withdrawing water from its dry-year storage and purchasing north of Delta water transfers. To preserve limited SWP supplies, Metropolitan is making operational adjustments to maximize use of Colorado River supplies, implementing the new Operational Shift Cost-Offset Program, and developing additional drought actions. To help manage demands, Metropolitan declared a Water Supply Alert on August 17, 2021 to help increase drought awareness and call for consumers and businesses to voluntarily reduce their water use.

For 2022, Metropolitan staff anticipates the initial SWP allocation to start as low as 0 percent given the exceptionally dry conditions and low storage in key reservoirs. To satisfy demands for the SWP constrained areas, Metropolitan has been in discussion with the Department of Water Resources (DWR) with regards to drawing water from southern SWP reservoirs beyond the amounts allotted for flexible storage. This is water in storage that Metropolitan counts on for emergencies. In addition, the SWP contract provides DWR the flexibility to serve, at a minimum, essential human health and safety needs throughout the SWP constrained areas. This type of operation may require DWR to seek further emergency declarations from the Governor. Metropolitan is assessing the needs for the SWP constrained areas for 2022. As for Metropolitan's Colorado River supplies in 2022, Metropolitan will have access to water stored in Lake Mead even though Lake Mead will operate at a Level 1 Shortage Condition in 2022.

Purpose

Informational

Attachments

- Attachment 1: Projected 2021 WSDM Storage Detail (5 percent SWP allocation)
Attachment 2: Agreements to Exchange or Return Stored Water and Cyclic Program Balances

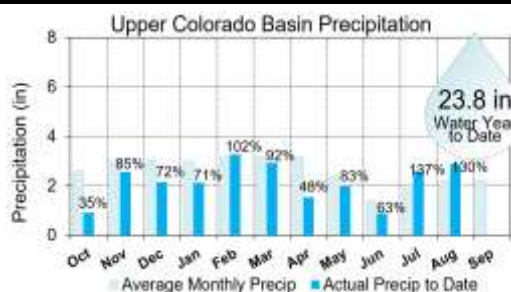
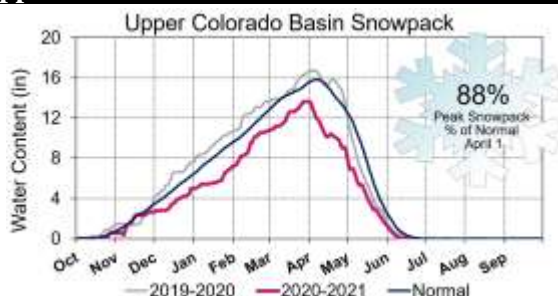
Detailed Report

This Water Surplus and Drought Management (WSDM) report provides an overview of developing hydrologic conditions and estimated water supply and demand conditions for CY 2021. This report also provides an outlook for Metropolitan's imported supplies for 2022.

HYDROLOGIC CONDITIONS

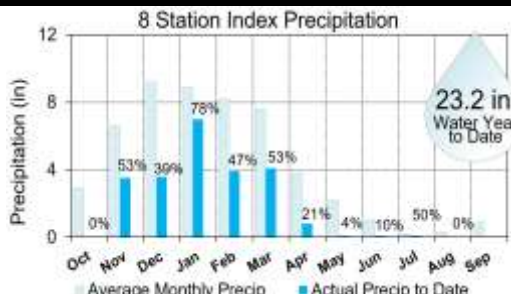
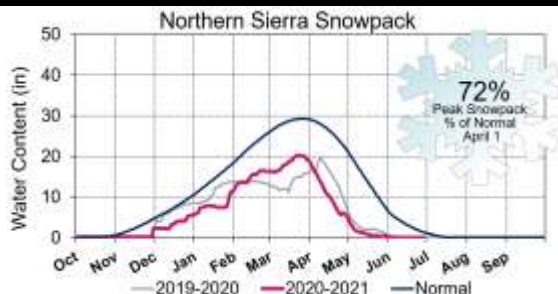
Conditions as of 8/30/2021

Upper Colorado River Basin



- Precipitation measured 23.8 inches or 82% of normal water year to date.
- Runoff into Lake Powell is forecasted to be 32% of average.

Sacramento River Basin



- Snowpack peaked at 72% of April 1 normal.
- Sacramento River runoff is forecasted to be 38% of average.

2021 SUPPLY ESTIMATE

Conditions as of 8/30/2021

CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
PVID Fallowing Program	40,000
Exchange w/ SDCWA (IID/Canal Lining)	283,000
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	6,000
Higher Priority Water Use Adjustment ¹	0
Total CRA Supplies	1,015,000

¹ Final adjustment could range by more than plus or minus 100 TAF.

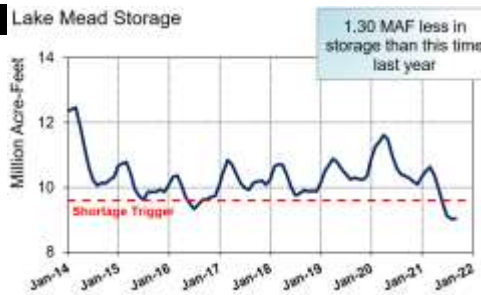
SWP Supplies	Acre-Feet
Table A (5% SWP allocation)	96,000
Article 21	0
Port Hueneme ¹	0
SWC Buyers Group Transfers ²	6,000
Yuba Accord Dry-Year Purchase Program ²	24,000
Total SWP Supplies ³	126,000

Total Supplies (CRA + SWP) 1,141,000
(Prior to storage actions)

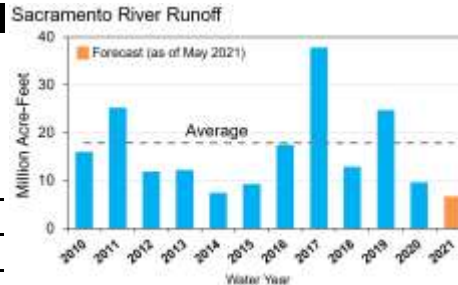
¹ Rounded to the nearest thousand. Supply is 92.5 AF.

² Current estimate subject to seller performance and losses.

³ Staff is aware of two member agency-managed SWP storage programs. Neither are moving water into MWD service area in 2021.



- Lake Mead storage is at 9.04 MAF (elevation 1068.00 feet).
- The Lower Basin will be in a Level 1 shortage for CY 2022 based on the August 24-month study that projects Lake Mead's water elevation to fall below 1,075 feet on January 1, 2022.



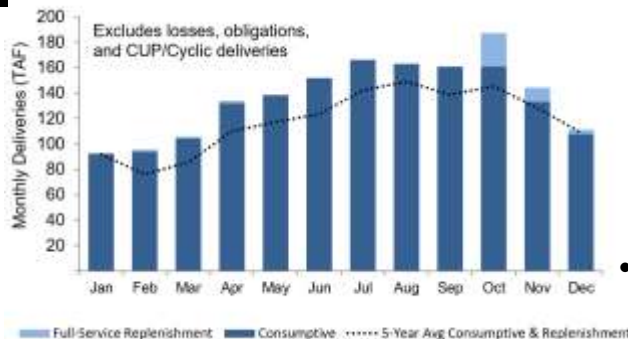
- Staff anticipates the initial SWP allocation for 2022 to start as low as 0 percent. Absent of an allocation, the operation of the SWP may provide for, at a minimum, essential human health and safety needs through the SWP service area. Metropolitan is assessing the health and safety needs for the SWP constrained areas for 2022.

2021 WATER DEMANDS

Current Demand	Acre-Feet
Member Agency Consumptive ¹	1,630,000
Member Agency Replenishment	47,000
Coachella Valley Water District Agreement	50,000
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	50,000
Cyclic Deliveries	0
Total Demands	1,793,000

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

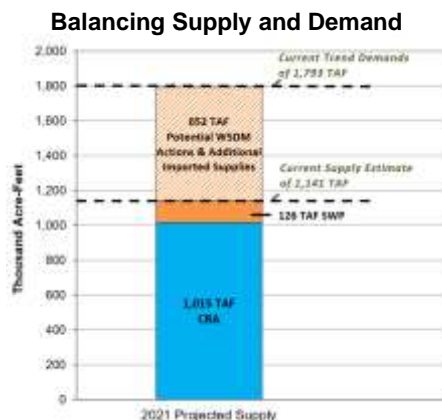
2021 Demand Estimate



- With continued dry and warm conditions, CY 2021 demands are projected to be higher than the 5-year average and August consumptive demands are the highest since 2014.
- Staff will begin reporting conservation performance for the region in October 2021.

MANAGING SUPPLIES AND DEMANDS

Supply/Demand Balance	Acre-Feet
Total Supplies	1,141,000
Total Demands	1,793,000
Current Balance Estimate	-652,000



Dry-Year WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to satisfy the estimated supply/demand gap and to preserve SWP storage for a potentially low SWP allocation in 2022.

- Withdrawing water from dry-year storage reserves.
- Purchasing north of Delta transfers through the Yuba Accord and the SWC Buyers Group.
- Adjusting system operations to preserve SWP supplies and maximize use of Colorado River or stored supplies. These actions include pumping at the Greg Avenue pump station, drafting water from Diamond Valley Lake to serve Mills Plant, and shifting demand to Colorado River service connections.
- Three Valleys Municipal Water District began shifting deliveries in September through the Operational Shift Cost-Offset Program.
- Metropolitan, in coordination with member agencies, are evaluating additional drought actions targeted at Metropolitan's SWP constrained areas. Categories for the drought actions are system and operations, shift timing of deliveries, increase local supplies, increase conservation, and expand WSDM programs.

2021 WSDM Storage Detail

	1/1/2021 Estimated Storage Levels	CY 2021 Take Capacity ¹	2021 Total Storage Capacity
WSDM Storage			
Colorado River Aqueduct Delivery System	1,293,000	91,000	1,657,000
Lake Mead ICS	1,293,000 ²	91,000 ³	1,657,000
State Water Project System	1,052,000	499,000	1,879,000
MWD SWP Carryover ⁴	207,000	207,000	350,000
DWCV SWP Carryover ⁴			
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic Lake (DWR Flex Storage)	154,000	154,000	154,000
Lake Perris (DWR Flex Storage)	65,000	65,000	65,000
Arvin Edison Storage Program	142,000	4,000 ⁵	350,000
Semitropic Storage Program	261,000	42,000	350,000
Kern Delta Storage Program	177,000	27,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
In-Region Supplies and WSDM Actions	872,000	494,000	1,246,000
Diamond Valley Lake	704,000	447,000	810,000
Lake Mathews and Lake Skinner	127,000	14,000	226,000
Conjunctive Use Programs (CUP) ⁶	41,000	33,000	210,000
Other Programs	694,000	57,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	313,000	57,000	800,000
Total	3,911,000	1,141,000	5,963,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) ⁷	3,161,000	1,141,000	5,213,000

¹ Take capacity assumed under a 5 percent SWP Table A Allocation. Storage program losses included where applicable.

² Reflects USBR's final accounting for 2020, released in May 2021.

³ Take capacity based on planned maintenance activities and current CRA supply estimate.

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

⁵ Take amounts dependent on exchange capabilities. Began receiving exchange of surface water supplies in August.

⁶ 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.

⁷ Total WSDM Storage level subject to change based on accounting adjustments.

Agreements to Exchange or Return Stored Water

	Future Returns ¹
California ICS Agreement – IID ²	164,000
Storage and Interstate Release Agreement with Southern Nevada Water Authority ³	330,000
Total (AF)	494,000 ⁴

¹ Rounded to the nearest thousand.

² IID can request return in any year, conditional on whether or not Metropolitan is implementing a Water Supply Allocation Plan.

³ Up to 30,000 AF per year beginning no earlier than 2022.

⁴ Subject to change based on accounting adjustments.

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	50,000	147,000	19,000	166,000	91,000	125,000
2020	125,000	2,000	0	2,000	50,000	77,000
2021 ¹	77,000	0	0	0	32,000	45,000

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



Update on Water Surplus and Drought Management

Water Planning and Stewardship Committee

Item 6a

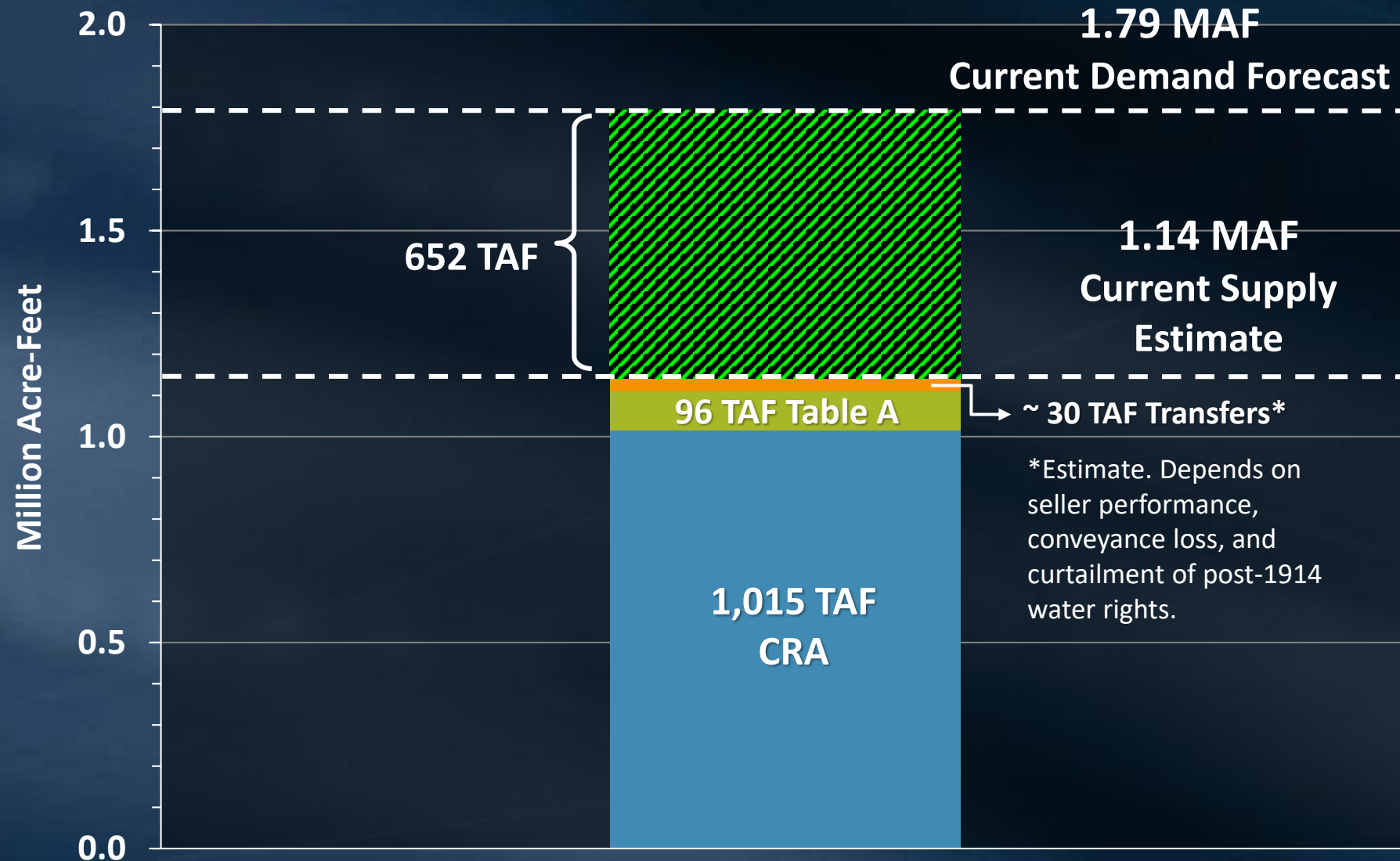
September 13, 2021

Outline

- 2021 Supply/Demand Balance and Actions
- Updates on Department of Water Resources Actions

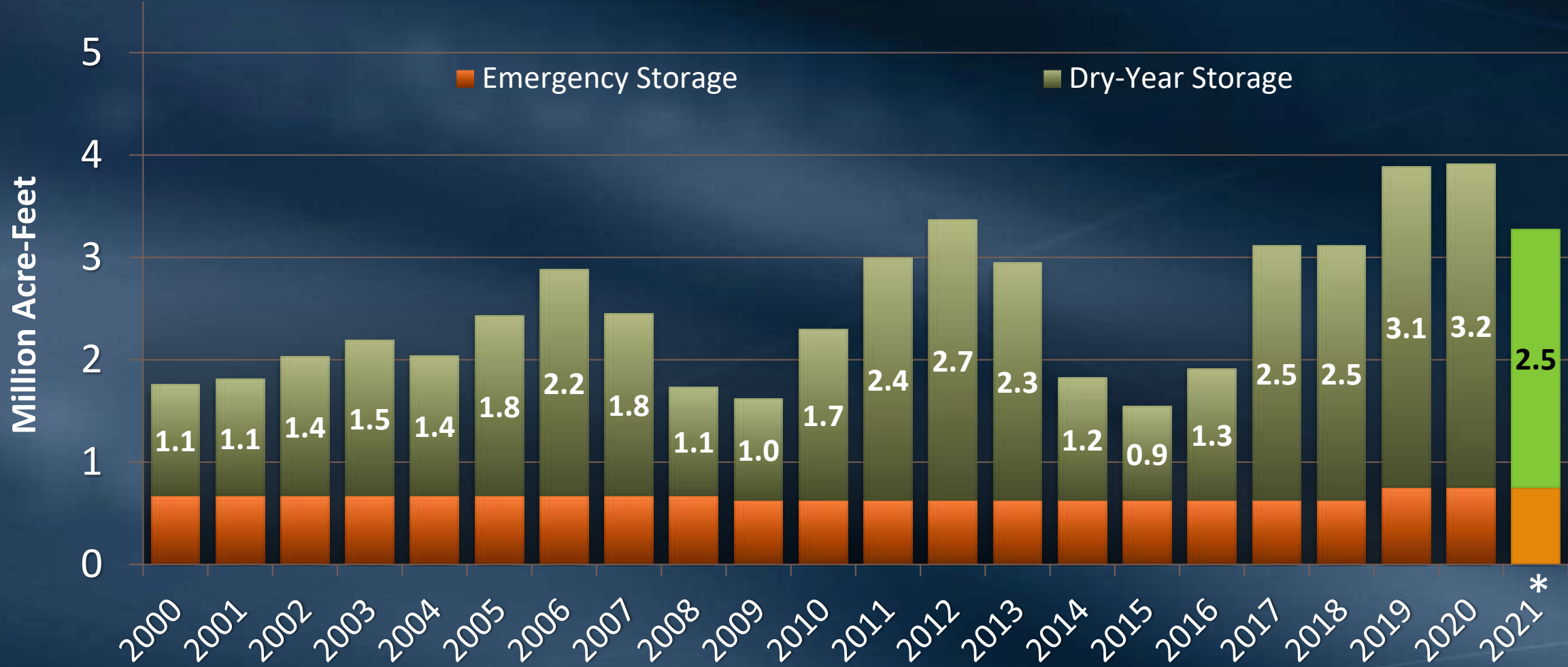
2021 Supply/Demand Balance and Actions

Drafting Storage in 2021 for Supply/Demand Balance



Projected Metropolitan Storage Balances

End of Year Balances





* Estimate – May change based on supply/demand conditions

Many Targeted Actions to Respond to Potential Historic Dry Conditions Began in January

Jan 2021	Feb 2021	Mar 2021	Apr 2021
<p>Began releases from DVL to serve connections on the Lakeview Pipeline</p>  <p>Minimize operational flow of SWP to areas that can receive both SWP and CRW</p>	<p>Metropolitan began pump-back operations at Lake Perris to withdraw flexible storage to meet Mills demands</p> 	<p>Returns from Semitropic Storage Program and Kern Delta Storage Program began</p>	<p>Began operating CRA at full capacity for the first time since 2015</p>  <p>Board voted to explore purchasing transfers north of the Delta</p> <p>Bulkheads installed to allow deliveries from DVL to Mills Plant</p> <p>Eastern MWD began shifting deliveries, when possible</p>

Many Targeted Actions to Respond to Potential Historic Dry Conditions Began in January

May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021
Board approved new Operational Shift Cost Offset Program (OSCOP)	Greg Avenue pumping station tests completed and began operation	West Basin MWD began shifting demands	Began receiving exchange of surface water supplies from the	TVMWD began shift through OSCOP
Lakeview Pipeline improvements completed		<div>Conserving roughly 140 - 180 TAF of SWP supplies</div>		
	Amended with DWR to increase stated max flow rate for DVL to Mills Plant operation		consumers and businesses to voluntarily reduce their water use	
DVL to Mills Plant in operation for the first time in Metropolitan's history				

Metropolitan Evaluates New Drought Actions for the Near and Long Term

- Generated 132 creative ideas
 - ~50 selected for further development

Project Categories



*System
and Operations*



*Shift Timing
of Deliveries*



*Increase Local
Supplies*



*Increase
Conservation*



*Expand
WSDM Programs*

Updates on Department of Water Resources Actions

Bleak Outlook for State Water Project



April 2021

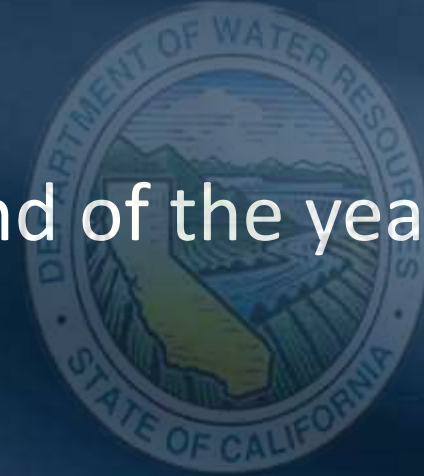


July 2021

- Anticipating a zero percent initial 2022 SWP Allocation
 - Oroville storage may end the year at record low levels
 - Competition for storage in San Luis Reservoir
 - Roughly even chance of 20 percent SWP allocation in 2022

Reclamation Borrows from DWR Supplies in San Luis Reservoir

- Reclamation and DWR may exchange water per written agreement and a Consolidated Place of Use (CPOU) Order from the State Water Resources Control Board (SWRCB)
- Reclamation borrowed 100 TAF so far:
 - 50 TAF on July 15
 - 25 TAF on August 26
 - 25 TAF on August 27
- Reclamation to pay back DWR by the end of the year



DWR is Requesting an Assessment of SWP Contractor 2022 Health and Safety Needs

- Article 18 (a) stipulates that if required, DWR may allocate SWP supplies on the basis of meeting minimum demands of contractors domestic, fire protection, or sanitation water needs during the year.
- Metropolitan's interpretation of this minimum demand includes the following components:

Health & Safety Needs



Drinking Water



Sanitation

Critical Needs



Fire Suppression



*Commercial
Industrial
Institutional*

Access Storage from Southern SWP Reservoirs

- Exploring opportunities to utilize DWR southern reservoir storage (primarily “emergency storage”) in anticipation of a low allocation as we start CY 2022
 - Need is at West Branch and Rialto Pipeline
- Metropolitan intends to return this water by the end of next year



Temporarily Modify SWP Pump-In Policy

- Some pump-in programs limited by water quality
- Consider impact & offsetting benefits on downstream stakeholders if modifying pump-ins
- Initiate discussions with DWR and the facilitation group



Summary

- Implementing WSDM and extraordinary drought actions to satisfy 2021 supply-demand gap and preserve SWP Carryover storage for 2022
- Ongoing coordination with DWR
 - Metropolitan has interest in the return of all water borrowed by Reclamation by the end of the calendar year
 - Metropolitan is preparing Health and Safety needs assessment for Metropolitan's SWP constrained areas for 2022
 - DWR is indicating actions may require a drought emergency declaration within Metropolitan's service area





Overview of Metropolitan's Water Supply Allocation Plan

Water Planning and Stewardship Committee

Item 6b

September 13, 2021

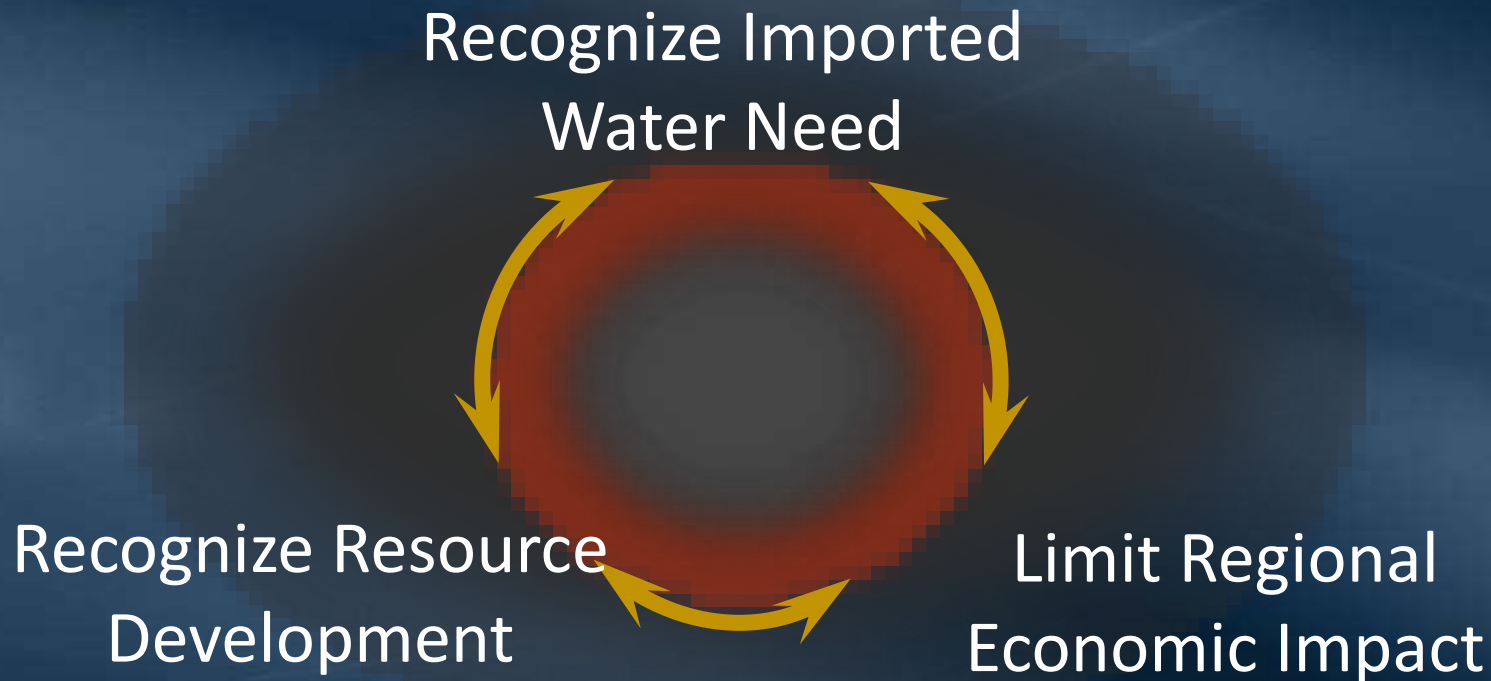
Overview

- Background and Purpose
- History and Development
- Next Steps

Background and Purpose

WSDM Plan Guiding Principle

“Metropolitan will encourage storage of water during periods of surplus and work jointly with its Member Agencies to minimize the impacts of water shortages on the region’s retail consumers and economy during periods of shortage”



Water Supply Allocation Plan (WSAP)

- Adopted in 2008; provides an approach for allocating available supplies to Member Agencies in times of water shortages
- Needs-based approach maintaining equity among Member Agencies and minimizing impacts on region
- Accounts for
 - Relative dependence on MWD
 - Population and economic growth
 - Local supply investments
 - Changes in local supplies
 - Demand hardening from recycled water use and conservation

State Law Allows Conservation Response

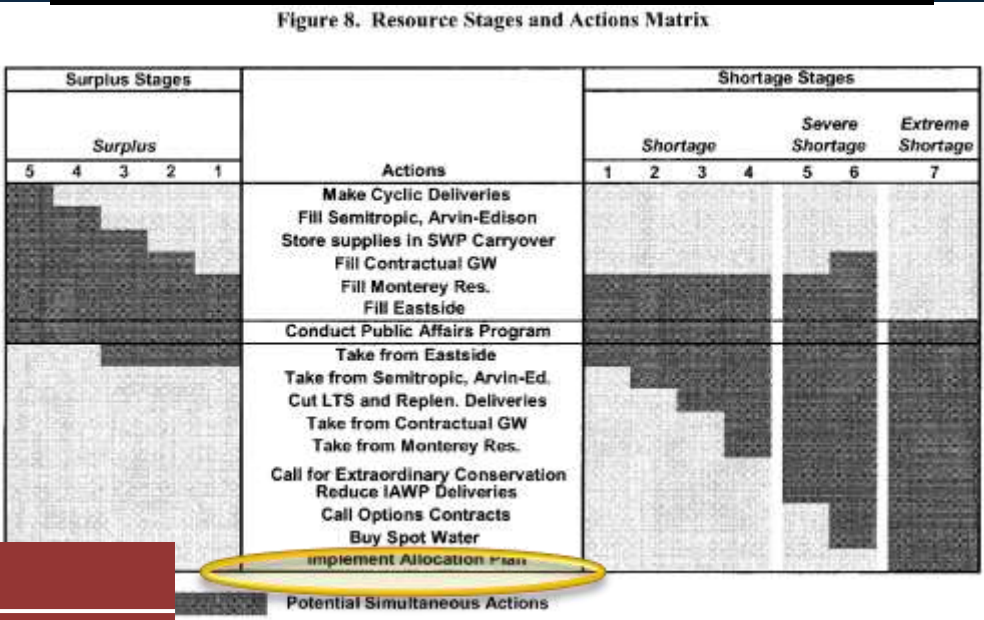
- Water Code § 350 *et seq.* (1953)
 - Grants wide discretion to address water shortage emergencies
 - Allows regulations to conserve supplies for “greatest public benefit”
 - Regulations prevail over other laws during period of emergency
- Water Code § 375 *et seq.* (1977)
 - Authorizes implementation of water conservation programs “notwithstanding any other law”
 - Can encourage water conservation through rate structure design
 - Allows enforcement of use limitations through volumetric penalties

Key Takeaways: WSAP and Preferential Rights

- Staff briefed Water Planning & Stewardship Committee on preferential rights in August 2021
 - Each agency maintains a preferential right to water
 - Preferential rights not preempted by WSAP
 - Agencies subject to rate surcharge, but not delivery shutoff
 - WSAP aligns with conservation provisions in California Water Code

WSAP Implementation is a WSDM Shortage Action

WSDM Resource Stages and Actions Matrix



WSAP Shortage Levels

Table 1: Shortage Allocation Index

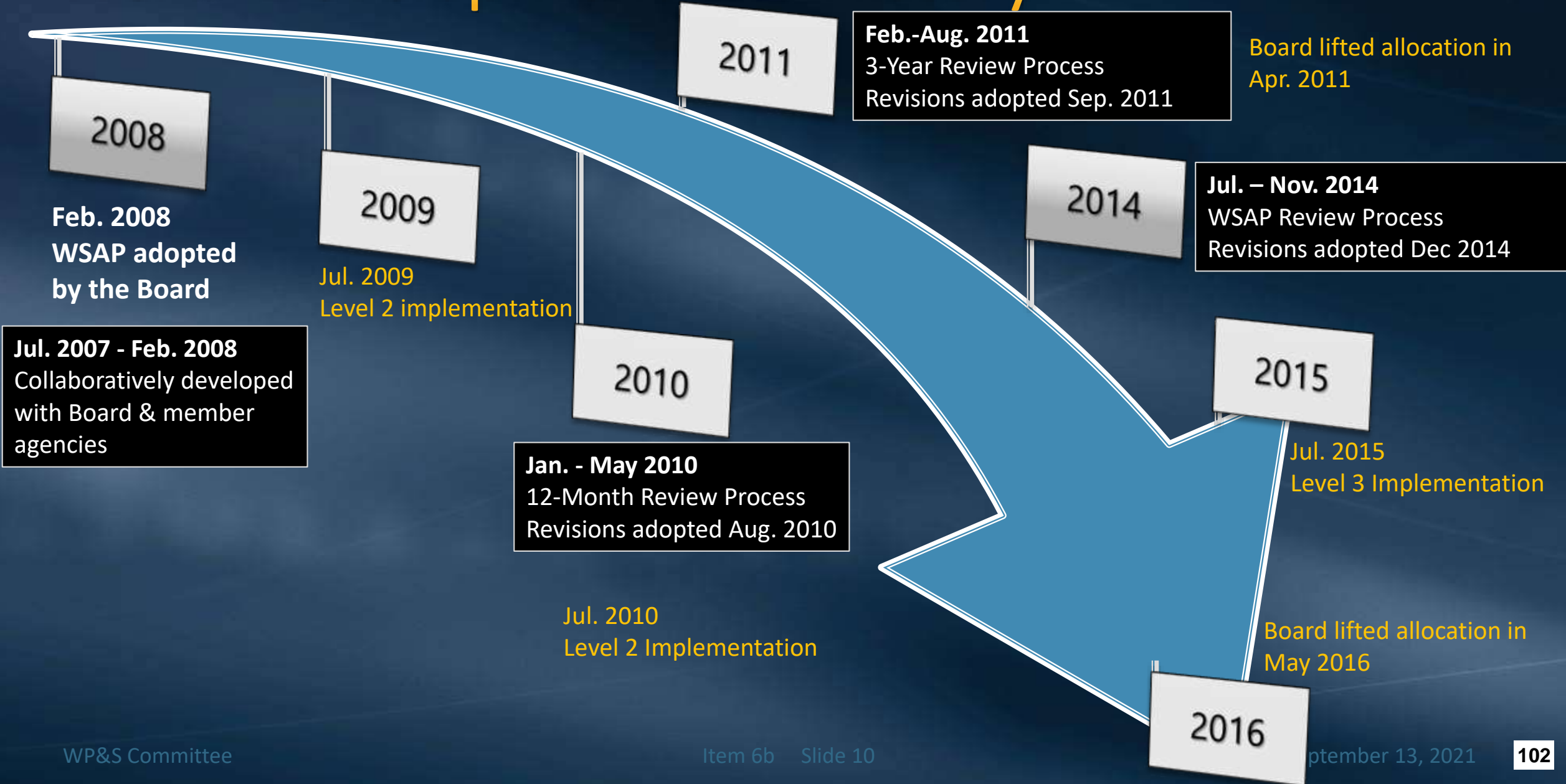
(a) Regional Shortage Level	(b) Wholesale Minimum Percentage	(c) Maximum Retail Impact Adjustment Percentage
1	92.5%	2.5%
2	85.0%	5.0%
3	77.5%	7.5%
4	70.0%	10.0%
5	62.5%	12.5%
6	55.0%	15.0%
7	47.5%	17.5%
8	40.0%	20.0%
9	32.5%	22.5%
10	25.0%	25.0%

Water Supply Conditions Framework

BASELINE Water Use Efficiency	Ongoing conservation, recycling, and outreach to build storage
CONDITION 1 Water Supply Watch	Local agency voluntary dry-year conservation measures and use of regional storage reserves
CONDITION 2 Water Supply Alert	Regional call for conservation through drought ordinances and other measures to mitigate use of storage
CONDITION 3 Water Supply Allocation	Implement Water Supply Allocation Plan: Level: 1 2 3 4 5 6 7 8 9 10

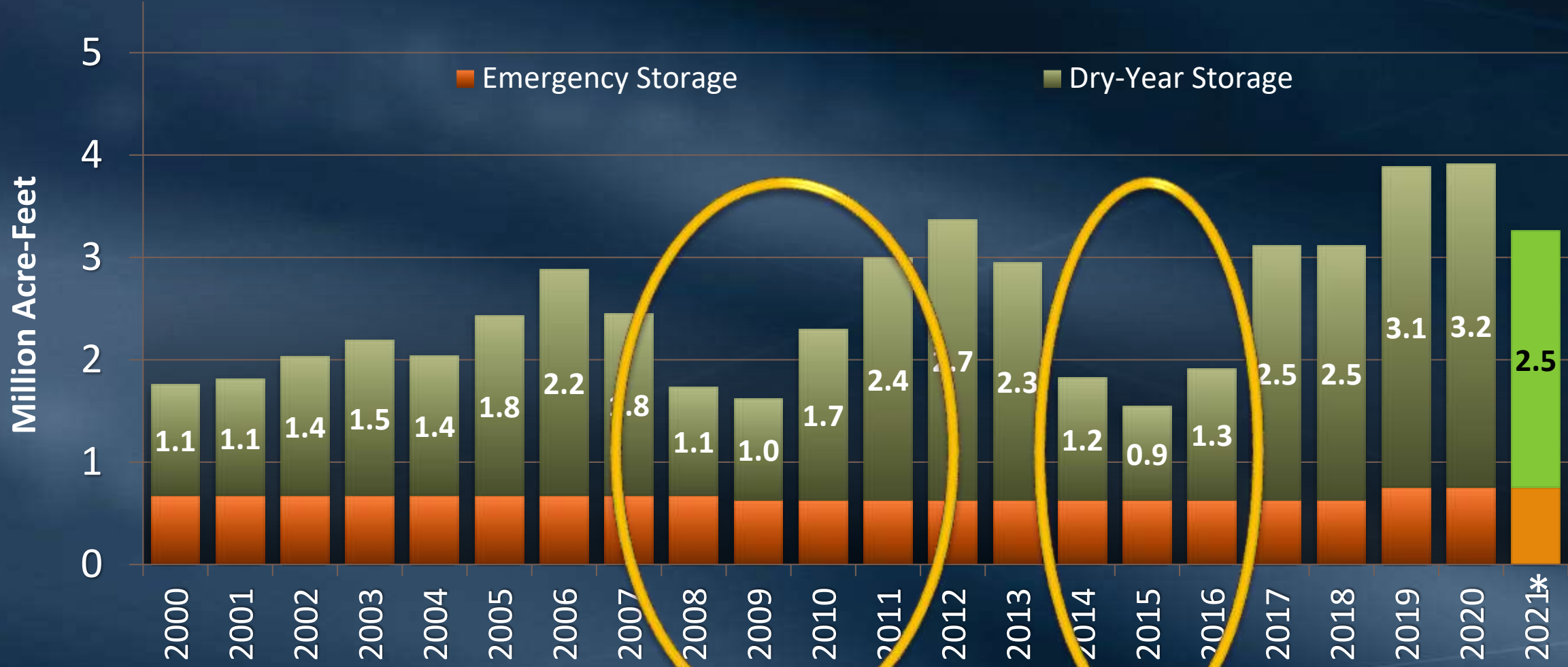
History and Development

WSAP Development and History



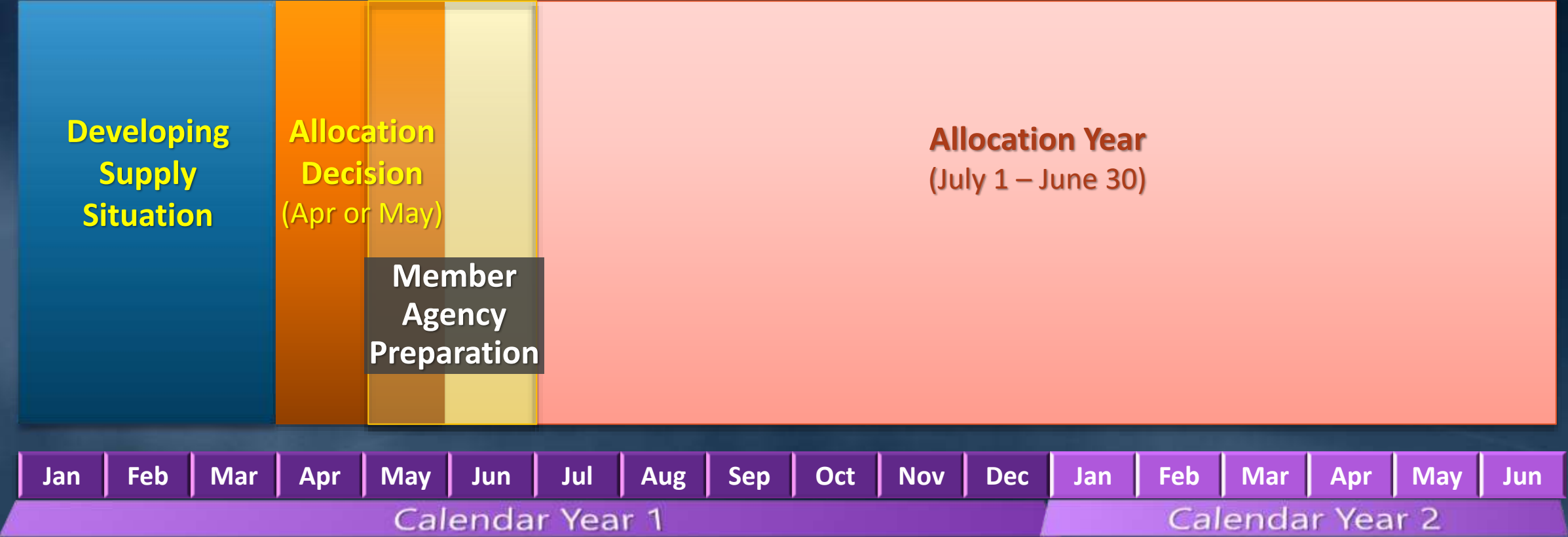
Historical Metropolitan Storage Balances

End of Year Balances



* Estimate – May change based on supply/demand conditions

WSAP Implementation Timeline



WSAP Implementation in 2009/10

- Level 2 Allocation, effective July 1, 2009 to June 30, 2010
- WSAP Baseline Allocation: **2.2 MAF**
- WSAP Level 2 Allocation: **1.9 MAF**
- Actual Member Agency purchases **1.8 MAF**
 - 400 TAF under Baseline, an 18% reduction in use
 - 100 TAF of additional reduction from Level 2 Allocation
- No member agency exceeded its allocation – no penalties or surcharges were applied

Next Steps

Potential Policy Questions and Next Steps

- Does the current WSAP approach meet the needs of the member agencies during times of shortage?
- Does the current WSAP approach need to be revised and/or updated?
- Potential topics for updating the current WSAP:
 - Base Period and Adjustments
 - Conservation Savings Estimate
 - Minimum Per Capita Water Use Credit
 - Allocation Surcharge





• 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 August 2021.

Purpose

Informational

Detailed Report

Lower Basin Shortage Declaration Announced

Due to the forecast of Lake Mead falling below elevation 1,075 feet at the end of the calendar year, the U.S. Bureau of Reclamation (Reclamation) announced the first Shortage Declaration for the Lower Basin when the August 24-Month Study was issued on August 16. The Shortage Declaration will trigger reductions in the amount of water that may be diverted by Arizona and Nevada. The Shortage Declaration will also trigger water savings contributions pursuant to Minute 323. The forecasted end-of-year elevation of Lake Mead is 1,068 feet; at this level California is not required to make any Lake Mead contributions and will not be required to do so until the elevation falls below 1,045 feet. Also, per the terms of the Drought Contingency Plan, Metropolitan will be able to take delivery of Intentionally Created Surplus in 2022, if needed to fill the Colorado River Aqueduct.

Palo Verde Irrigation District (PVID) System Conservation Agreement

Metropolitan, Southern Nevada Water Authority, Central Arizona Water Conservation District, and Reclamation finalized an agreement to fund land fallowing programs and forebear up to nearly 180,000 acre-feet of conserved Colorado River water generated by the program to add system water to Lake Mead. Metropolitan's funding share represents one-sixth of the total amount provided by the funding agencies. Reclamation will apply its 50 percent share towards meeting the Secretary of the Department of the Interior's commitment to annually create or conserve at least 100,000 acre-feet of System Conservation Water pursuant to a term in the Lower Basin Drought Contingency Plan. The water would be conserved through additional fallowing that is not needed for Metropolitan's own use under the Palo Verde Irrigation District/Metropolitan Forbearance and Fallowing Program. Metropolitan and other Colorado River water users will benefit from the improved storage in Lake Mead, reducing the risk of future water curtailments.

To implement the program, Metropolitan has made a voluntary fallowing call for the upcoming contract year (August 1, 2021 – July 31, 2022) of 75 percent of the maximum fallowing level under the contract, and farmers may begin fallowing at any time from August 1 through January 1, 2022. Land owned by Metropolitan will also participate in the program. As of August 1, the average fallowing level under the voluntary program is 58 percent of the maximum call. That number will likely increase as more farmers roll into the program throughout the fall season.

PVID/Metropolitan Property Utilization Committee Meets

On August 27, the Property Utilization Committee (PUC) met in Palm Desert to discuss management of Metropolitan owned land in the Palo Verde Valley. The PUC is made up of three board members each from PVID and Metropolitan and was formed in 2001 following Metropolitan's purchase of land in the Palo Verde Valley. The PUC's purpose is to provide input to Metropolitan on how it manages its Palo Verde owned lands for the benefit of the Palo Verde Valley regions. The PUC tasked staff from both agencies to explore new collaborative efforts that could be taken by PVID and Metropolitan to benefit the region and the community that resides in it. The next meeting to discuss these efforts is scheduled for December of this year.



Water Resource Management Manager's Report

Water Planning and Stewardship Committee

Item 7b

September 13, 2021

Conservation Expenditures

FY 20/21-21/22⁽¹⁾

	Paid ⁽²⁾	Committed ⁽³⁾
Regional Devices	\$4.7M	\$3.9M
Member Agency Administered	\$1.6M	\$7.2M
Turf Replacement	\$8.9M	\$8.1M
Advertising	\$0.1M	\$0.0M
Other	\$1.9M	\$1.1M
TOTAL	\$17.2M	\$20.3M

(1) The Conservation Program biennial expenditure authorization was \$86M and expected expenditures were \$50M.

(2) As of 7/1/2020 –7/31/2021.

(3) Committed dollars as of August 10, 2021.

Conservation Activity: Outdoor

Fiscal Year 2020/21



Turf Replacement Rebates:
4,290,921 ft² removed



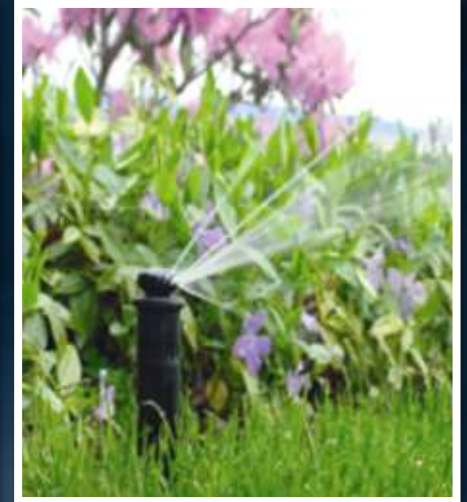
Smart Irrigation Controllers:
14,099 units rebated



Rain Barrels and Cisterns:
3,036 units rebated



Sprinkler Nozzles:
29,715 units rebated



Conservation Activity: Indoor

Fiscal Year 2020/21



Clothes Washers:
18,258 units rebated



Toilets:
11,358 units rebated

**41,655 Acre Feet Lifetime Water Savings
for all Indoor/Outdoor Devices & Turf Replacement**

Future Supply Actions Webinar: Recycled Water Treatment

- Wednesday, Sept. 15, 10:30 a.m.
- Disinfection strategy for reservoir augmentation



**San Diego County
Water Authority**



PADRE DAM
Municipal Water District

