



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

**Adjourned Water Planning and
Stewardship Committee - Final -
Revised 1**

Meeting with Board of Directors *

August 16, 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, August 16, 2021
Meeting Schedule**

09:30 a.m. - Adj. F&I
10:30 p.m. - Adj. E&O
12:00 p.m. - Break
12:30 p.m. - Adj. WP&S
02:30 p.m. - Adj. C&L
03:30 p.m. - Adj. 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 meeting of the Water Planning and
Stewardship Committee held July 12, 2021

[21-322](#)

Attachments: [08162021 WPS 2A draft minutes](#)

3. CONSENT CALENDAR ITEMS - ACTION

- 7-5** Adopt resolution to declare a “Condition 2 - Water Supply Alert”; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [Subject Revised 8/10/2021] [21-385](#)

Attachments: [08172021 WPS 7-5 B-L](#)
[08172021 WPS 7-5 Presentation.pdf](#)

- 7-6** 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 [21-387](#)

Attachments: [08172021 WPS 7-6 B-L.pdf](#)
[08172021 WPS 7-6 Presentation.pdf](#)

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

4. OTHER BOARD ITEMS - ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

- a. Update on Water Surplus and Drought Management [21-364](#)

Attachments: [08162021 WPS 6a Report](#)
[08162021 WPS 6a Presentation.pdf](#)

- b. Report on upcoming Colorado River negotiations [21-381](#)

Attachments: [08162021 WPS 6b Presentation.pdf](#)

- c. Overview of Preferential Rights [21-365](#)

Attachments: [08162021 WPS 6c Presentation.pdf](#)

7. MANAGEMENT REPORTS

- a. Colorado River Matters [21-362](#)

Attachments: [08162021 WPS 7a Report](#)

- b. Bay-Delta Management Report [21-386](#)

Attachments: [08162021 WPS 7b Report](#)

- c. Water Resource Management Manager's Report [21-363](#)

Attachments: [08162021 WPS 7c 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

WATER PLANNING AND STEWARDSHIP COMMITTEE

July 12, 2021

Chair Atwater called the teleconference meeting to order at 12:05 p.m.

Members present: Chair Atwater, Vice Chair Kurtz, Directors Abdo, Ackerman, Cordero, De Jesus, Lefevre, Morris, Petersen, Peterson (entered after roll call), Pressman, and Record.

Members absent: Directors Dick, Goldberg, Hogan, and Luna.

Other Board Members present: Chairwoman Gray, Directors Blois, Butkiewicz, Dennestedt, Erdman, Faessel, Fellow, Jung, Murray, Ortega, Ramos, Smith, and Tamaribuchi.

Committee staff present: Coffey, Hagekhalil, Hasencamp, Hughes, Munguia, 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 June 7, 2021

3. CONSENT CALENDAR ITEMS – ACTION

- 7-7 Subject: Authorize agreement with Inland Empire Utilities Agency, West Valley Water District, and San Bernardino Valley Water District to provide assistance on water deliveries; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Presented by: Jessica Arm, Associate Resource Specialist, Water Resource Management

Motion: Authorize the General Manager to enter into an agreement with IEUA, West Valley, and Valley District to provide West Valley assistance with water deliveries in the event of an emergency or planned outage, or the loss of local supply

Ms. Arm gave a presentation on the proposed agreement that would assist Inland Empire Utilities Agency deliver water to a small portion of West Valley Water District during planned or unplanned outages.

7-8 Subject: Authorize payments, by a two-thirds vote, of up to \$3.56 million for participation in the State Water Contractors for fiscal year 2021/22; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

Presented by: Jack Safely, Imported Supply Unit, Water Resource Management, Water Resource Management

Motion: By a two-thirds vote, authorize the General Manager to make payments of up to \$3.56 million to the State Water Contractors for FY 2021/22.

Mr. Safely provided a presentation that discussed Metropolitan's dues payment to the State Water Contractors (SWC) to purchase water from the State Water Project (SWP). He also reviewed SWC's budget, activities, and initiatives.

Director Morris moved the Consent Calendar items. Director Kurtz seconded.

The following Director provided comments or asked questions:

1. Ortega

The vote was:

Ayes: Directors Abdo, Ackerman, Atwater, Cordero, De Jesus, Kurtz, Lefevre, Morris, Petersen, Peterson, Pressman, and Record.

Noes: None.

Not voting: None.

Absent: Directors Dick, Goldberg, Hogan, and Luna.

The motion passed by a vote of 12 ayes, 0 noes, 0 not voting, and 4 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

a. Subject: Oral Update on Water Surplus Drought Management

Presented by: Tiffany Tran, Assistant Resource Specialist II, Water Resource Management

Ms. Tran provided an update on drought conditions, water supply, 2021 supply and demand balance, and dry year Water Surplus Drought Management actions that are underway. She also reviewed the governor’s drought proclamation and Executive Order in response to the drought.

Mr. Deven Upadhyay, Assistant General Manager and Chief Operating Officer, added commentary regarding the state’s drought conditions, how Metropolitan is responding regionally to meet member agency needs, discussions with the state officials relating to the governor’s office recent actions, and the challenges facing the Central Valley Project and SWP.

Mr. Adel Hagekhalil, General Manager, also provided comments regarding discussions between Metropolitan and the State concerning coordination of water strategy and unified messaging related to investing in resiliency and water storage.

The following Directors provided comments or asked questions:

1. Peterson
2. Ortega
3. Butkiewicz

b. Subject: Report on Storage Management Strategy and Implementation

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

Mr. Polyzos provided a presentation that reviewed Metropolitan's storage portfolio and how staff implements the WSDM Plan with respect to storage programs, and implementation over the last ten years.

The following Directors provided comments or asked questions:

1. Smith
2. Murray

7. MANAGEMENT REPORTS

- a. Subject: Colorado River Matters

Presented by: Bill Hasencamp, Manager, Colorado River Resources

Mr. Hasencamp reported on Colorado River activity that focused on impacts to record low storage in Lake Mead. He highlighted a recent article in the Los Angeles Times regarding Lake Mead and provided information on the shortage declaration resulting from dry conditions.

The following directors provided comments or asked questions:

1. Ackerman
2. Smith

- b. Subject: Water Resource Management Manager's Report

Presented by: Brad Coffey, Manager Water Resource Management

Mr. Coffey gave an update on conservation expenditures and activity, the Multi-Family Property Toilet Replacement Program, the Residential Flow Monitor/Leak Detection Device Pilot Program, and he explained the Future Supply Actions webinar.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

Director Abdo made a request for a discussion of increasing conservation activity during this drought. Director Peterson made a request for a discussion on a Palo Verde Irrigation District land purchase opportunity and guidance to Real Property Group. Director Smith made a request for an update on a policy on the economics of storage.

10. ADJOURNMENT

Next meeting will be held on August 16, 2021.

Meeting adjourned at 1:45 p.m.

Richard Atwater
Chair



- Board of Directors
Water Planning and Stewardship Committee

8/17/2021 Board Meeting

7-5

Subject

Adopt resolution to declare a “Condition 2 – Water Supply Alert”; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

A second consecutive dry year is impacting California’s water supplies. Worsening conditions led to a State Water Project allocation for 2021 of only 5 percent, tied for the lowest in history. With drought widespread throughout much of the state, Governor Newsom declared drought emergencies in 50 of 58 counties (which do not include the six counties in Metropolitan’s service area). On July 8, 2021, the governor issued an executive order that called upon all Californians to voluntarily reduce their water use by 15 percent.

This letter recommends the Board adopt a Water Supply Alert Resolution. The recommended action would move Metropolitan’s Water Supply Condition from a “Water Supply Watch” to a more severe “Water Supply Alert” and communicate increasingly serious drought conditions affecting the state’s water supplies and drafting of Metropolitan’s regional storage reserves. The resolution, which does not implement the Water Supply Allocation Plan, provides a basis for the outreach, communication, and collaboration in Metropolitan’s service area needed to effectively support Governor Newsom’s drought emergency proclamations and his call for Californians to voluntarily conserve.

Details

Background

A second consecutive year of exceptionally low precipitation, snowpack, and runoff is impacting California’s water supplies. Due to persistently dry conditions, the Department of Water Resources (DWR) set the allocation of State Water Project (SWP) water to 5 percent for 2021. This followed a low allocation of only 20 percent in 2020. Worsening conditions prompted Governor Newsom to declare three sets of expanding drought emergencies across the state.

The overall sequence of actions can be summarized as follows:

- On April 21, Governor Newsom proclaimed a regional drought emergency in Mendocino and Sonoma counties.
- On May 10, a second proclamation expanded the drought emergency to an additional 39 counties.
- On June 9, the California Public Utilities Commission, the State Water Resources Control Board, and the California Department of Water Resources called on local and regional suppliers to increase their conservation efforts, to develop a contingency plan in the event of water supply problems, and to urge Californians to save water amid ongoing dry conditions and in anticipation of another dry year in 2022.
- On July 8, Governor Newsom expanded the drought state of emergency once again, which applied to a total of 50 counties covering 42 percent of the state’s population. The drought state of emergency does not include the six counties in Metropolitan’s service area. On the same day, the governor also issued Executive Order N-10-21, calling for all Californians to voluntarily reduce their water use by 15 percent.

Paralleling the Newsom Administration's measured response and increasing actions in response to the drought, Metropolitan initiated numerous drought actions earlier this year. Beginning in January 2021, Metropolitan adjusted distribution system operations to minimize SWP use and to draw more heavily on Colorado River and stored supplies. In April, Metropolitan increased pumping on the Colorado River Aqueduct to the full capacity of eight pumps for the first time since the depths of the last drought in 2015. In May, the Board approved the Operational Shift Cost Offset Program, which removed a barrier to agencies receiving Metropolitan service from Colorado supplies instead of SWP supplies. Also, in May—for the first time in history—the source water feed to the Mills water treatment plant was switched from SWP to Diamond Valley Lake storage. In June, staff began operating the fully rebuilt Greg Avenue pump facility allowing Colorado River and stored supplies to be pumped at a rate of about 50 cubic feet per second (cfs) into the western portion of the distribution system. Along with this sampling of actions, as well as continued coordination with member agencies and identification of new actions moving forward, the proposed Water Supply Alert would be a next step to advance the region's messaging to water users.

As a result of prior local and regional investments in local supplies and conservation, and the region's actions described above, the counties in Metropolitan's service area were not included in the emergency drought proclamations to date. The drought state of emergency applied to counties already experiencing imminent and urgent water supply impacts this year. Metropolitan's water supplies and storage are being affected by two years of extreme drought, but current impacts are mitigated by the reliability investments made locally and regionwide. Metropolitan has invested \$1.5 billion in regional conservation, local water recycling, and local groundwater recovery projects since 1990, and Metropolitan's programs and planning led to high regional storage reserves entering this drought. On the water use efficiency side, Southern California consumers and water agencies have long done their part to make conservation a way of life and to prepare for the future. The value of the region's past preparedness, actions, and commitment to conservation is evident today. In fact, the California Natural Resources Agency submitted a report to the Legislature in March 2021 outlining lessons from the drought of 2012-2016, which recognized that "The storage projects put in place by MWD and the San Diego County Water Authority greatly improve regional capacity to endure drought."

However, Metropolitan recognizes the need for coordinated drought response and supports the governor's statewide call for voluntary conservation from all Californians. As with the rest of the state, Southern California's water supplies are reduced by the drought. Looking ahead, there are multiple threats to the region's water supply outlook over the next few years. This year's extremely low 5 percent SWP allocation highlights the challenges that constrained SWP supplies create in areas not readily served by Colorado River supplies. These SWP-specific constraints require heavy reliance on storage reserves to replace the low SWP allocation resulting in a sharp drop in the overall water storage that is accessible to these areas. It is expected that next year's 2022 SWP allocation will start at 0 percent and could even stay at that level if the drought persists. These severe projections incorporate recognition of depleted storage in the SWP's Lake Oroville and San Luis Reservoir and how parched soils in the Sierra watersheds may deplete next year's runoff.

Metropolitan often relies on the Colorado River Aqueduct and Colorado River storage and supply programs to compensate for SWP supply fluctuations, but it cannot be taken for granted that Metropolitan will be able to take its full amount of Colorado River supplies into the future. The Colorado River will experience its first-ever shortage declaration next year based on the long-term drought in that watershed. A prolonged 21-year warming and drying trend pushed Lake Mead and Lake Powell to record low levels. For all these reasons, it is crucial for the region to take appropriate actions now to safeguard its water storage reserves as conditions continue to change and the outlook worsens.

Conservation has long underpinned Metropolitan's long-term water supply reliability strategy. The governor's timely and measured call for voluntary conservation from agricultural and urban water users in Californian presents an opportune moment to review and refresh consumer commitment to using water responsibly statewide. In the end and on the whole, the water use ethic, behavior, and decisions of individual consumers can tip the precarious balance of supply and demand. Agencies such as Metropolitan can play a key function in supporting

and amplifying the governor’s message and assisting consumers to make their good faith effort to use water responsibly.

Recommendation for Water Supply Alert Resolution

Staff recommends the Board adopt a Water Supply Alert Resolution, the third of a four-step water supply condition. Adopting the Water Supply Alert Resolution would communicate the increasingly serious drought conditions affecting the state’s water supplies by moving Metropolitan’s Water Supply Condition Framework from a “Condition 1 – Water Supply Watch” to a “Condition 2 – Water Supply Alert.” The resolution, included as **Attachment 1**, provides a basis for the outreach, communication and collaboration in Metropolitan’s service area needed to effectively support Governor Newsom’s drought emergency proclamations and his call for voluntary conservation. **Attachment 2** provides examples of practicable actions that help the region’s consumers to immediately redouble their efforts to save water through voluntary conservation.

The Board adopted the Water Supply Condition Framework (Framework) in June 2008 to help communicate the urgency of the region’s water supply situation. Consistent with the Water Supply and Drought Management (WSDM) Plan, the Framework communicates and encourages proactive steps that water agencies and consumers could take to reduce the region’s water demand and mitigate the need for more severe actions. The Framework has four conditions, each calling for an increasingly heightened level of response:

Baseline: Water Use Efficiency	Ongoing implementation of conservation, recycling and outreach programs to achieve permanent increases in water use efficiency and build storage reserves.
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 cities, counties, member agencies, and retail water agencies to implement extraordinary conservation through drought ordinances and other measures to mitigate the use of storage reserves.
Condition 3: Water Supply Allocation	Implement Metropolitan’s Water Supply Allocation Plan.

Metropolitan has remained in “Condition 1: Water Supply Watch” since April 2017, which reflects continued impacts experienced in the 2012-2016 drought. A Condition 2 Water Supply Alert acknowledges the heightened urgency of the supply situation both regionwide and statewide and provides a launching point for outreach and collaboration with local agencies to support Californians in Metropolitan’s service area to voluntarily conserve.

Importantly, conservation programs are already up and running by Metropolitan and local agencies throughout the service area. This Water Supply Alert would enhance the speed and scale of consumer and agency actions rather than signaling a new direction. Approximately 250 wholesale and retail water suppliers serve the region. As a practical step, the resolution would highlight timely opportunities identified in their recently adopted Urban Water Management Plans (UWMPs). The UWMPs adopted this year include specific Water Shortage Contingency Plans that contain an array of water supply and demand management measures that can be used as water supply conditions change. As a result of this action, Metropolitan would ask local agencies to consider the actions identified in their Water Shortage Contingency Plans as appropriate for their local conditions. The proposed resolution recognizes this improved toolbox of potential actions and would encourage agencies to use those appropriate demand reduction actions to help their consumers voluntarily save water and preserve regional storage reserves. The region’s water agencies are well positioned to support their consumers in voluntarily conserving additional water.

Moving forward, the Conservation as a California Way of Life legislation that was enacted in 2018 is now being implemented, with annual shortage reporting to the state on track to begin next year. The new standard Annual Water Supply and Demand Assessments will provide important information on specific localized drought impacts and response actions that can better inform the state in the future.

Metropolitan would coordinate with its member agencies to develop a unified regional message in the media and outreach campaigns in order to communicate the need for continued conservation to the general public, businesses, stakeholders, industries, and public officials. In line with Governor Newsom's May 10, 2021 announcement of a \$5.1 billion plan for water infrastructure, drought response, and improved climate resilience, Metropolitan will work to obtain state funding and other resources to accelerate conservation and supply programs.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

By Minute Item 48376, dated August 17, 2010, the Board adopted proposed adjustments to the Water Supply Allocation Plan, and the allocation of seawater barrier supplies for the 2010/11 Allocation Year.

By Minute Item 48803, dated September 13, 2011, the Board adopted adjustments to the Water Supply Allocation Plan.

By Minute Item 49979, dated December 9, 2014, the Board adopted adjustments to the Water Supply Allocation Plan.

By Minute Item 50824, dated May 9, 2017, the Board adopted a resolution which declared a "Condition 1 – Water Supply Watch."

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, where it can be seen with certainty that there is no possibility that the proposed action may have a significant impact on the environment, the action is not subject to CEQA pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the proposed Water Supply Alert Resolution.

Fiscal Impact: Upon adoption of the Water Supply Alert Resolution, expenditures in Metropolitan's conservation programs will likely increase to levels of activity still within the adopted budget as customers respond to the call for voluntary conservation.

Business Analysis: The local city, county, member agency, and retail water agency actions called for in Water Supply Alert will help the region preserve storage, reduce the magnitude of a potential shortage in 2022, and assist the state of California in achieving Governor Newsom's call for voluntary conservation.

Option #2

Adopt the proposed Water Supply Alert Resolution with modifications to the actions called for within the resolution.

Fiscal Impact: Upon adoption of the Water Supply Alert Resolution, expenditures in Metropolitan's conservation programs will likely increase to levels of activity still within the adopted budget as customers respond to the call for voluntary conservation.

Business Analysis: The local city, county, member agency, and retail water agency actions called for in Water Supply Alert will help the region preserve storage, reduce the magnitude of a potential shortage in 2022, and assist the state of California in achieving Governor Newsom's call for voluntary conservation.

Option #3

Do not adopt the proposed Water Supply Alert Resolution.

Fiscal Impact: Metropolitan may need to purchase more transfer water or take additional financial actions to protect storage reserves.

Business Analysis: The magnitude of a potential shortage in 2022 may increase and may trigger emergency declarations for Southern California Counties. Less support would be provided to achieve Governor Newsom's call for voluntary conservation.

Staff Recommendation

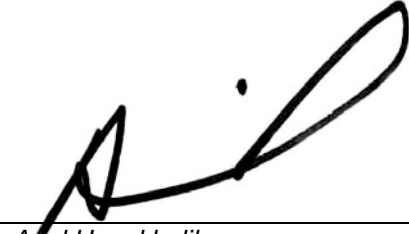
Option #1



Brad Coffey
Manager, Water Resource Management

8/10/2021

Date



Adel Hagekhalil
General Manager

8/10/2021

Date

Attachment 1 – Water Supply Alert Resolution**Attachment 2 –Recommended Water Conservation Actions**

Ref# wrm12682369

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA
CALLING FOR A WATER SUPPLY ALERT**

WHEREAS, Metropolitan's two main sources of imported water, the Colorado River and Northern California, face continuing drought conditions; and

WHEREAS, the Colorado River is experiencing a prolonged 21-year warming and dry trend and California is in a second consecutive dry year; and

WHEREAS, precipitation and snowpack in the Upper Colorado River Basin and in California are below normal to date; and

WHEREAS, warm temperatures and extremely dry soils have depleted the expected runoff water from the Upper Colorado River Basin snowpack and Northern Sierra snowpack into reservoirs; and

WHEREAS, storage in Lake Powell, Lake Mead, and Lake Oroville are each at record low levels and that many reservoirs throughout the state are well below average conditions at this date; and

WHEREAS, the California Department of Water Resources State Water Project Table A Allocation is at only five percent of contract amounts; and

WHEREAS, a zero percent initial State Water Project Allocation is anticipated for 2022 due to severe drought conditions; and

WHEREAS, the United States Bureau of Reclamation studies indicate a first shortage declaration for 2022 for the Colorado River System; and

WHEREAS, Metropolitan has invested \$1.5 billion in conservation, local water recycling, and local groundwater recovery since 1990 resulting in the cumulative savings of nearly 7.3 million acre-feet; and

WHEREAS, Metropolitan member agencies have invested billions of dollars in these and other investments to increase the utilization of local supplies; and

WHEREAS, these programs increase water supply reliability and reduce the region's need to import water supplies; and

WHEREAS, Metropolitan has made recent investments in its delivery system to add flexibility, allowing Metropolitan to deliver water from either of its imported water sources to most of the service area; and

WHEREAS, Metropolitan has been actively adjusting system operations and partnering with its member agencies to minimize Metropolitan's use of SWP supplies; and

WHEREAS, the California Natural Resources Agency submitted a report to the Legislature in March 2021 outlining lessons from the drought of 2012-2016 which recognized that "storage projects put in place by MWD and the San Diego County Water Authority greatly improve regional capacity to endure drought" and "large urban water agencies have more capacity to prepare for and respond to drought than smaller systems, and most have historically experienced drought primarily in the form of financial impacts that are ultimately passed on to ratepayers;" and

WHEREAS, on April 21, May 10, and July 8, 2021, Governor Gavin Newsom issued proclamations that a state of emergency exists in a total of 50 of 58 counties due to severe drought conditions, including a call for Californians to voluntarily reduce their water use; and

WHEREAS, the state of emergency does not exist in Metropolitan's service area; and

WHEREAS, action by Californians now to conserve water and to extend local groundwater and surface water supplies will provide greater resilience if the drought continues in future years; and

WHEREAS, Metropolitan supports actions by the state to address droughts in California with programs to promote water use efficiency; and

WHEREAS, water conserved throughout the service area, among other things, helps preserve storage levels in Metropolitan's diverse storage portfolio for next year should dry conditions persist; and

WHEREAS, Metropolitan supports state actions which recognize and value prior investments in water supply reliability and drought preparedness

WHEREAS, variations among communities, regions, and counties means that a "one-size fits all" drought response may unintentionally disincentivize future investment in water supply reliability; and

WHEREAS, local water suppliers and communities have made strategic and forward-looking investments in water recycling, stormwater capture and reuse, groundwater storage and other strategies to improve drought resilience; and

WHEREAS, further investment is needed to improve water supply reliability for all Californians; and

WHEREAS, Governor Gavin Newsom announced a \$5.1 billion plan for water infrastructure, drought response and improved climate resilience and Metropolitan strongly advocates for its use of state funds to accelerate conservation and supply programs; and

WHEREAS, Metropolitan's Water Surplus and Drought Management Plan guides Metropolitan's water supply management actions and includes provisions for implementing water conservation; and

WHEREAS, Metropolitan intends to help the region support the Governor's call for voluntary conservation; and

NOW THEREFORE BE IT RESOLVED that the Board of Directors of The Metropolitan Water District of Southern California, under its Water Surplus and Drought Management Plan, declares that Southern California in Metropolitan's service area is in a Water Supply Alert condition; and

BE IT FURTHER RESOLVED that Metropolitan encourages all cities, counties, member agencies (consisting of wholesale and retail water agencies), and all retail water agencies to review their past drought response measures and their newly-adopted state Water Shortage Contingency Plans and implement voluntary conservation measures that support retail customer in reducing their water use and continue to preserve regional storage reserves; and

BE IT FURTHER RESOLVED that Metropolitan will coordinate with the member agencies to develop a unified regional message in the media and outreach campaigns in order to communicate the need for continued conservation to the general public, businesses, stakeholders, industries and public officials; and

BE IT FURTHER RESOLVED that Metropolitan will work to obtain state funding and other resources to accelerate conservation and supply programs.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held August 17, 2021.

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



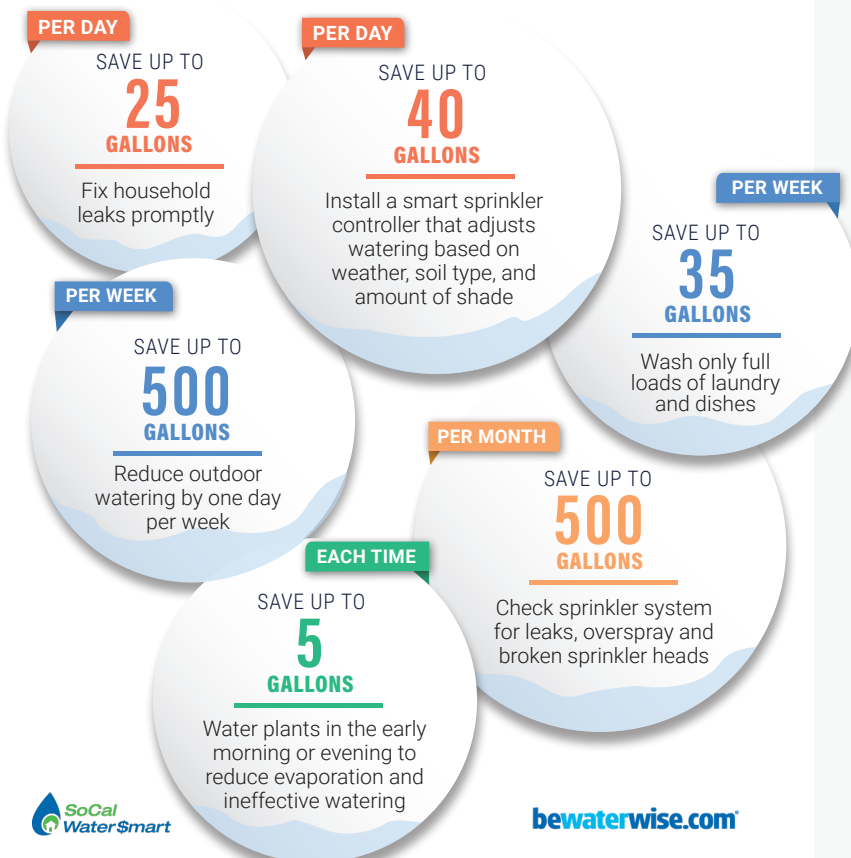
THE METROPOLITAN WATER DISTRICT
of SOUTHERN CALIFORNIA

One Water Many Ways to Save

Water conservation has become a way of life in Southern California. Residents have reduced their water use over the past three decades, and we are one as we meet the challenges created by this year's historic drought and climate change. Metropolitan, along with its member agencies, offers rebates and incentives to help residents and businesses continue to make saving water a California way of life.

Everyday Ways to Save

Reducing household water use is simple, here's how much residents can save with the following actions:



Residential Rebates

Turf Replacement

Homeowners are eligible for \$2 or more per square foot of lawn converted to California Friendly® and native landscapes. Local water agencies may offer an additional incentive amount. Nearly 200 million square feet of grass has been transformed to more sustainable, water-saving gardens and landscapes with this program.

Indoor and Outdoor Devices

Residents are encouraged to take advantage of rebates on water-efficient devices including:

- Premium high-efficiency toilets
- High-efficiency clothes washers
- Rotating sprinkler nozzles
- Rain barrels and cisterns
- Weather-based irrigation controllers
- Soil moisture sensor systems
- Flow monitor/leak detection devices

Commercial Rebates

Businesses, multifamily property owners, institutions and public agencies are also eligible for rebates.

These include:

- Turf replacement
- High-efficiency plumbing fixtures
- HVAC equipment
- Commercial kitchen and food equipment
- Medical and dental equipment

On-Site Retrofit Program

Provides financial incentives to commercial, industrial and institutional property owners, including Homeowner Associations, who convert potable water irrigation or industrial water systems to recycled water use. This program offers \$195 per acre-foot for five years of estimated water use, up to actual retrofit costs.

Water Savings Incentive Program

Designed for non-residential customers looking to improve water efficiency through upgraded equipment or services. This program provides an incentive based on the amount of water saved, allowing for unique and custom projects like changing industrial process water system to capture, treat, and re-use wastewater.



Declaring a Condition 2 - Water Supply Alert

Water Planning and Stewardship Committee

Item 7-5

August 16, 2021

Overview

- Revisit Metropolitan's Water Supply Condition Framework
- Recommendation to move to Condition 2: Water Supply Alert

Water supply condition framework background

- Adopted in 2008
- Communicates the urgency of the region's water supply situation, based on prevailing supply and demand conditions
- Four conditions with increasing heightened levels of conservation response
- Intended to encourage proactive steps to reduce the region's water demand before a need for more severe actions
- Board determines movement from one Condition to another

Water Supply Condition Framework

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

Feb
2014

April
2015

May
2016

May
2017

Currently at Condition 1: Water Supply Watch

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

Feb
2014

April
2015

May
2016

May
2017

Recommending Condition 2: Water Supply Alert

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

Feb
2014

April
2015

May
2016

May
2017

Aug
2021

Proposed Water Supply Alert Resolution

- Declares that Southern California in Metropolitan's service area is in a Water Supply Alert condition
- Urges cities, counties, member agencies, and retail agencies to review their past drought response measures and their newly-adopted Water Shortage Contingency Plans to identify and implement appropriate demand reduction actions to help consumers voluntarily save water
- Metropolitan will work with the member agencies to develop a unified regional message of the need for continued conservation
- Metropolitan will work to obtain state funding and other resources to accelerate conservation and supply programs

Intent of Resolution

- Recognition that drought conditions persist in both imported water supply watersheds
 - Warm temperatures and dry soils have depleted the expected runoff
 - Storage in Lake Powell, Lake Mead and Oroville are at record low levels
- Supply outlook for both imported watersheds is bleak
 - Zero percent initial SWP Allocation
 - First shortage declaration for 2022 for the Lower Colorado River Basin

Intent of Resolution

- Recognition of the investments that southern California has made in local supply programs and conservation thereby reducing the need for imported supplies
- Recognition of the investments made in Metropolitan's distribution system increasing operational flexibility and partnering with its member agencies to minimize use of SWP supplies
- In support of the actions by the state to support water use efficiency and avoid disincentivizing future investments in water supply reliability with a "one-size fits all" approach

Recommended Action

- Declare a “Condition 2 – Water Supply Alert”
- Adopt resolution

Board Options

- Option #1
 - Adopt the proposed Water Supply Alert Resolution.
- Option #2
 - Adopt the proposed Water Supply Alert Resolution with modifications to the actions called for within the resolution.
- Option #3
 - Do not adopt the proposed Water Supply Alert Resolution.

Staff Recommendation

- Option 1





- Board of Directors
Water Planning and Stewardship Committee

8/17/2021 Board Meeting

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

Executive Summary

Staff requests board authorization to enter into an agreement with the United States Geological Survey (USGS) for \$357,000 to evaluate existing ponds on Metropolitan's Delta Islands for their potential to assist in preserving Delta smelt. Pursuant to the agreement, field reconnaissance in ponds on Metropolitan's property in the Delta would be conducted under a contract with the USGS to assess the suitability of the ponds for Delta smelt research. The UC Davis Fish Conservation and Culture Laboratory is a research facility supporting the conservation of Delta smelt, and this monitoring study would support scientific endeavors related to this facility. A total of eight existing ponds, two on each of the four islands, are available as potential sites for Delta smelt research. The reconnaissance would involve monitoring and assessment of water quality conditions and biological characteristics of the ponds. There would be four surveys from October 2021 through January 2022. The cost of the reconnaissance monitoring and assessment would be \$424,165, with a cost share from USGS of \$67,875 and in-kind contributions by the California Department of Water Resources (DWR). Staff is seeking authorization of up to \$357,000 but will also seek funding from the State Water Contractors for a portion of that cost. The lead researchers are from USGS but will include collaborations with technical staff from the DWR, the Bureau of Reclamation (Reclamation), and the United States Fish and Wildlife Service (FWS).

In light of the critically dry conditions in the Bay-Delta watershed, on the heels of the historic multi-year drought of 2012-2015, Delta smelt resiliency is a serious concern for resource managers. To address this concern, Reclamation has committed \$14 million, and DWR has committed \$5 million, to be spent over the next five years for research and the expansion of the UC Davis Fish Conservation and Culture Laboratory, as well as to inform supplementation of Delta smelt into the wild. This monitoring and assessment study provides an opportunity for Metropolitan to work with Reclamation, DWR, UC Davis, and the state and federal fish agencies to provide a controlled environment for future field studies to advance scientific understanding of Delta smelt habitat and life cycle, as well as investigate methods and procedures for potential future Delta smelt supplementation.

Details

Background

The Delta smelt is a small fish species endemic to the San Francisco Estuary. Since the 1980s, the Delta smelt population has exhibited a decline in abundance leading it to be listed as endangered under the California Endangered Species Act and as threatened under the U.S. Endangered Species Act (ESA). Further recent declines in Delta smelt population abundance have prompted grave concern that the species is particularly vulnerable. At the time of its listing under the ESA, only the basics of the species' life history were known. In the intervening 26 years, enough has been learned about the Delta smelt to support its propagation in captivity over multiple generations. The situation has led resource managers to actively pursue options for supplementation of the wild population with fish from a refugial conservation population maintained in culture at the UC Davis Fish Conservation and Culture Laboratory. Through cooperative efforts of several agencies since that time, refinement of these techniques has assisted in the development of a captive refugial population as one level of security

against species extinction and in maintaining the genetic diversity of the species and a reliable supply of captive-reared fish for research. As part of DWR's implementation of California's Delta Smelt Resiliency Strategy, it hosted a Delta smelt extinction workshop in 2016. At that workshop, there was widespread consensus that cultured Delta smelt in captivity should be part of the species recovery toolbox.

More recently, supplementation of the wild Delta smelt population with fish raised in captivity is a conservation measure proposed by Reclamation and DWR through the ESA §7(a)(2) consultation with the FWS on the long-term operations of the Central Valley Project and State Water Project (SWP) (2019 Biological Assessment). Support for studies to inform a conservation hatchery and potential future supplementation is also contained in DWR's Incidental Take Permit (ITP) issued by the California Department of Fish and Wildlife (CDFW) for the long-term operation of the SWP (2020 ITP). The conservation hatchery and future supplementation was to provide a genetic bank, alleviating effects of further population decline, bolstering the resilience of the population in poor recruitment years, and allowing the population to withstand stressful environmental conditions associated with recurring drought.

The first step in the process described was the development of a supplementation strategy by the FWS. The approaches, research, and experiments identified in the supplementation strategy are intended to increase the likelihood that the population of Delta smelt will be sustained in the wild. The FWS has recently developed its Delta smelt Supplementation Strategy (DSSS) to provide a scientific and regulatory roadmap for achieving successful reintroduction of Delta smelt. The strategy outlined in the DSSS capitalized on an initial period of research, monitoring, and evaluation of the efficacy and effects of hatchery production and contained release of cultured Delta smelt. An important next step that was highlighted in the DSSS is the development of science to guide uncontained releases of Delta smelt into the wild. A fundamental problem facing managers right now with Delta smelt supplementation is that it is unknown if cultured Delta smelt will survive and complete their life cycle when introduced freely into a natural habitat. Delta smelt supplementation could be informed by the proposed research on Metropolitan's properties. However, it is currently unknown if the existing ponds on Metropolitan's islands are suitable for supporting Delta smelt from the conservation hatchery.

Metropolitan is working with multiple state and federal government agencies to advance those agencies' research objectives through multiple collaborative study efforts. Metropolitan is coordinating with the interagency Culture and Supplementation of Smelt (CASS) process. This process is a critical coordination forum among four agencies (FWS, Reclamation, CDFW, and DWR) that will be involved in supplementation implementation efforts. Each of the CASS agencies plays an important role in each step described in this strategy. Interagency coordination allows for focus on (1) the use of fish for research, (2) policy direction, and (3) identification and coordination on regulatory steps. In addition to coordination with the CASS, Metropolitan would be working closely with staff from DWR, FWS, and USGS as well as researchers from UC Davis to implement the studies. As part of Reclamation and DWR's conservation actions, Reclamation has committed approximately \$14 million, and DWR has committed approximately \$5 million, to be spent over the next five years for research and introduction of Delta smelt hatchery fish into the Delta. The FWS is the lead agency in efforts to introduce conservation hatchery Delta smelt into the Delta channels for the first time, with the first release anticipated in fall-winter 2021. For the uncontained releases of Delta smelt to be successful, additional research is required. This monitoring project would provide important information about the water quality and biological resources in existing ponds on Metropolitan's properties. If conditions in one or more of these ponds are capable of supporting hatchery Delta smelt, or if new ponds could be constructed utilizing the information gained through these monitoring studies, the FWS, DWR, Reclamation, USGS, UC Davis, and Metropolitan could partner to complete studies to test hypotheses related to best methods and procedures for introducing non-contained hatchery Delta smelt into the wild using the controlled conditions provided by these existing ponds. If suitable conditions exist, or could exist, on Metropolitan's properties, staff would bring future research and/or habitat development opportunities to the Board for consideration.

An early investment from Metropolitan in monitoring and assessment will provide data necessary to inform whether future partnerships and research opportunities on Delta islands should be part of Reclamation, FWS, and DWR's research efforts. If these monitoring studies are successful, it could lead to valuable partnerships and future opportunities to complete vital research targeting the conservation of Delta smelt utilizing Metropolitan's properties.

For a summary of the key terms in the agreement, see **Attachment 1**.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

2021 Legislative Policies and Principles [Adopted December 8, 2020, Section III(A)(2)]: Support funding to improve scientific understanding of listed Delta fish and wildlife species and water project operations in the Delta, including data collection real-time monitoring, and modeling. Promote the use of best available science to enhance flexibility for water project operations while maintaining regulatory and statutory protections for species listed under state and federal endangered species acts

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists of basic data collection, research, experimental management, and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines). Additionally, the proposed action involves feasibility or planning studies for possible future actions which the agency, commission or board has not yet approved, adopted or funded. Accordingly, the proposed action qualifies as a Statutory Exemption (Section 15262 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to enter into an agreement with USGS for up to \$357,000 for water quality and biological monitoring and assessments on Metropolitan's Delta properties.

Fiscal Impact: Expend existing budgeted funds of up to \$357,000 from the FY 2021/22 budget by reprioritizing studies and expenditures.

Business Analysis: Provides funding for research to support Delta smelt monitoring and assessments using Metropolitan's Delta properties that could help improve prospects for Delta smelt conservation.

Option #2

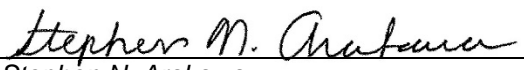
Do not authorize the General Manager to enter into an agreement with USGS for up to \$357,000 for water quality and biological monitoring and assessments on Metropolitan's Delta properties.

Fiscal Impact: No reprioritizing of budgeted funds

Business Analysis: Would not provide funding for research to support Delta smelt conservation efforts using Metropolitan's Delta properties. Instead, there would be greater reliance on the state and federal agency efforts being conducted per regulatory obligations in the federal Biological Opinion and state ITP to improve prospects for Delta smelt preservation.

Staff Recommendation

Option #1


Stephen N. Arakawa
Manager, Bay-Delta Initiatives

8/11/2021

Date


Adel Hagekhalil
General Manager

8/11/2021

*Date***Attachment 1 – Term Sheet – Delta Smelt Augmentation Research**

Ref# eo12681053

Term Sheet - Delta Smelt Augmentation Research

Purpose: To provide \$357,000 in funding to the US Geological Survey to evaluate existing ponds on Metropolitan's Delta islands for their potential to assist in preserving Delta smelt.

Objective: This project will assess the water quality and biological attributes of the existing on-island ponds. That information will be used to decide whether to use, enhance, or build new on-island impoundments for the purpose of assisting Delta smelt supplementation.

The project will assist in the transition of Delta smelt from the existing small tank enclosures located in the south Delta near the Skinner Fish Collection Facility to a more natural habitat maintaining and enhancing the wild genetic traits that will allow for successful reintroduction to the Delta. Creating healthy on-island aquatic conditions beneficial for smelt can help other at-risk fish species (Sacramento-splittail, longfin smelt, etc.), which can be explored in future years.

Benefits: Metropolitan's reliable supply of water from the State Water Project (SWP) is dependent on a healthy Delta ecosystem and stable native fish populations. Saving the Delta smelt benefits Metropolitan by reducing regulatory constraints and potentially improving operational flexibility of the SWP facilities. Furthermore, continuing to work collaboratively with state, federal, and local agency partners builds trust, relationships, and collaboration to achieve shared ecosystem restoration and sustainable Delta goals. Finally, a healthy ecosystem prevents the listing of additional species that could increase regulatory restrictions, decrease flexibility to respond to changing conditions, and decrease water supply reliability.

Parties: The US Geological Survey and The Metropolitan Water District of Southern California

Term: The Agreement is drafted to include a two-year term.

Cost: The total cost of this research agreement is \$424,875. The cost share breakdown is as follows:

- \$357,000 Metropolitan
- \$67,875 US Geological Survey
- In-kind (California Department of Water Resources, US Fish and Wildlife Service, California Department of Fish & Wildlife, University California at Davis).

Key Tasks:

- Determine whether water quality is within tolerance of Delta smelt. Sample and assess water and soil for potential legacy herbicides, pesticides, and add fungicides that could impair Delta smelt survival.
- Determine whether water in ponds is of a quality within tolerance of Delta smelt. Sample water for the following constituents: dissolved oxygen, temperature, turbidity, salinity, chlorophyll, and dissolved oxygen.
- Determine whether ponds support other fish that may compete with Delta smelt. Sample using a variety of survey methods. Sample composition and density of zooplankton, a food source for Delta smelt.



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

Water Planning and Stewardship Committee

Item 7-6

August 16, 2021

Overview

- Problem

- Native population of Delta Smelt are on the verge of extinction unless immediate actions are taken

- Objective

- Evaluate existing aquatic habitat on Metropolitan's Delta Islands for their potential to assist in preserving Delta smelt



Research Partners

- US Geological Survey
- US Fish and Wildlife Service
- California Dept. of Fish & Wildlife
- California Dept. of Water Resources
- University of California at Davis
- Others



Research

- Location
 - Metropolitan Islands
 - 8 ponds – size ranges 7-50 acres
- Surveys
 - Aug, Sep, Oct, & Nov 2021
- Elements analyzed
 - Water quality
 - Biological inventory
- Research Agency
 - US Geological Survey
- Cost
 - \$357,000 Metropolitan
 - \$68,000 USGS
 - In-kind (DWR, USFWS, CDFW, UC Davis)



Support

“I am very supportive of Metropolitan Water District’s collaborative efforts to advance research and propagation of Delta smelt, Sacramento Splittail, Longfin smelt, Hitch and Tule perch on MWD’s islands.”

– Dr. Peter Moyle, Distinguished Professor Emeritus, UC Davis, 28 May 2021

“DWR recognizes the importance of the MWD impoundments as a potential supplementation research tool and views them as a viable alternative to the hatchery for both experimentation and propagation”

– California Department of Water Resources, Office of Water Quality and Estuarine Ecology, 23 June 2021



News Articles

“It's an all-hands-on-deck, precarious situation. Extinction is real on our side of the equation.”

– **Chuck Bonham**, Director, California Fish & Wildlife, AgriPulse, 27 May 2021

“Delta smelt are already on the verge of extinction, and low inflow will affect salinity levels, a concerning sign going into the year.

– **Paul Souza**, Director, U.S. Fish and Wildlife, AgriPulse, 27 May 2021



Summary & Next Steps

- Aquatic habitat studies could lead to valuable partnerships and future opportunities for the conservation of Delta smelt utilizing Metropolitan's properties
- Staff will bring future research and/or habitat development opportunities to the Board

Board Options

- Option #1

- 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.

- Option #2

- Do not 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

Staff Recommendation

- Option #1





● Water Surplus and Drought Management Update *Conditions as of 8/2/2021*

Summary

This report provides an accounting of water supply, demand, and storage conditions for calendar year (CY) 2021. This report considers conditions as of August 2, 2021.

The State Water Project (SWP) allocation is 5 percent of Table A. Warm temperatures and extremely dry soils have depleted the expected runoff from the Northern Sierra Snowpack. Runoff into the Sacramento River for the water year is projected to be the fourth lowest on record. Water years 2020 and 2021 are the second driest two-year period on record following 1976-1977.

On July 23, 2021, the State Water Resources Control Board (SWRCB) notified senior right holders in the Delta watershed that there are insufficient supplies for any diversions for some pre-1914 appropriative claims or to support full diversion by some riparian claims. In addition, the SWRCB approved an emergency curtailment regulation on August 3, 2021. Staff continues to evaluate the impacts to transfers and will reflect any additional impacts in subsequent reports.

In the Upper Colorado River Basin, runoff into Lake Powell is also projected to be well below normal. The water year runoff is projected to be the second lowest on record. The latest United States Bureau of Reclamation (USBR) 24-month study, released in July, continues to project Lake Mead's water elevation to fall below the Level 1 shortage trigger (1,075 feet) at the end of the calendar year. The first ever shortage declaration is anticipated to be announced in August for the Lower Basin which will impact Arizona, Nevada, and Mexico.

The current demand estimate is 1.78 million AF. This results in a supply/demand gap of 644 TAF given the current 5 percent SWP allocation and the Colorado River Aqueduct (CRA) supply estimate. To satisfy the supply/demand gap and preserve SWP surface storage for a potentially dry 2022, 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 and in-region storage, continuing to work with agencies on the implementation of the new Operational Shift Cost-Offset Program, and developing and evaluating additional drought actions.

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

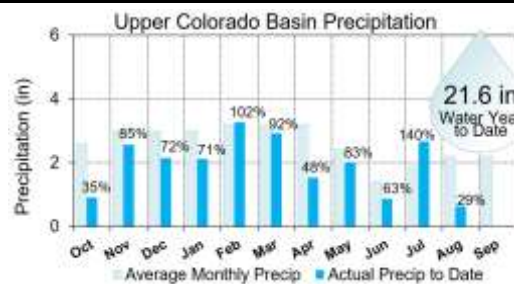
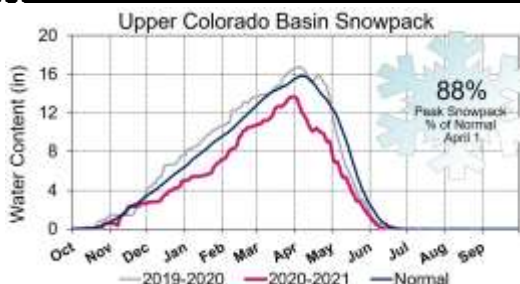
Detailed Report

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.

HYDROLOGIC CONDITIONS

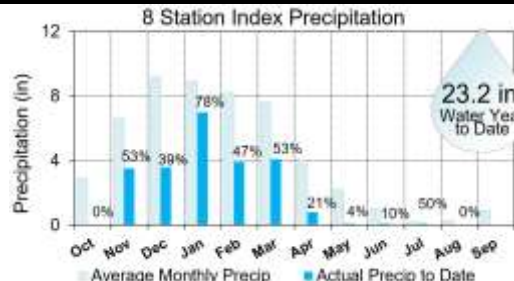
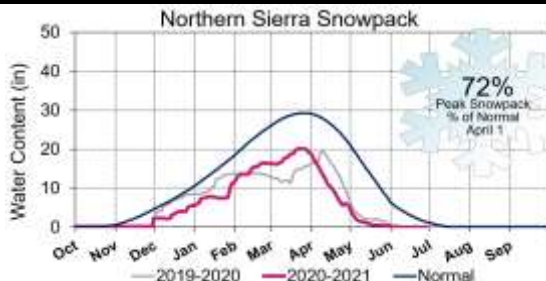
Conditions as of 8/2/2021

Upper Colorado River Basin



- Precipitation measured 21.6 inches or 80% of normal water year to date.
- Runoff into Lake Powell is forecasted to be 32% of average.

Sacramento River Basin



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

2021 SUPPLY ESTIMATE

Conditions as of 8/2/2021

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.

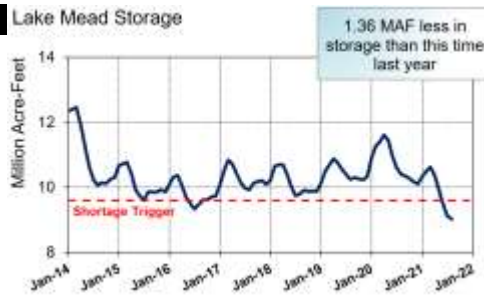
SWP Supplies	Acre-Feet
Table A (5% SWP allocation)	96,000
Article 21	0
Port Hueneme ¹	0
SWC Buyers Group Transfers ²	6,000
Yuba Accord Dry-Year Purchase Program ²	20,000
Total SWP Supplies ³	122,000

Total Supplies (CRA + SWP) 1,137,000
(Prior to storage actions)

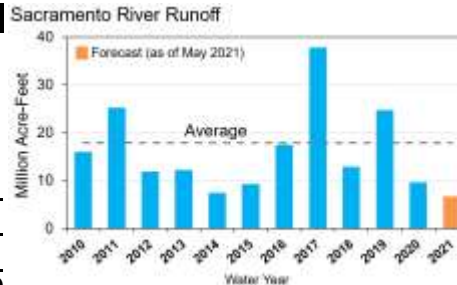
¹ Rounded to the nearest thousand. Supply is 92.5 AF.

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 9.03 MAF (elevation 1067.85 feet).
- USBR's July 24-month study continues to show Lake Mead's water elevation declining over the next two years. In August, the 24-month study will continue to project Lake Mead falling below 1,075 feet on January 1, 2022, and the first ever shortage (Level 1) will be declared for CY 2022.



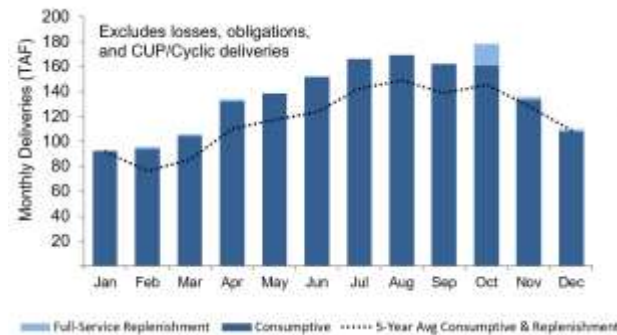
- Staff continues to evaluate the impacts of the notice of water unavailability to senior water right claimants and the emergency curtailment regulation to transfers.

2021 WATER DEMANDS

Current Demand	Acre-Feet
Member Agency Consumptive ¹	1,638,000
Member Agency Replenishment	27,000
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	1,781,000

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

2021 Demand Estimate



- With continued dry and warm conditions, 2021 demands are projected to be higher than the 5-year average, and July consumptive demands are the highest since 2014.

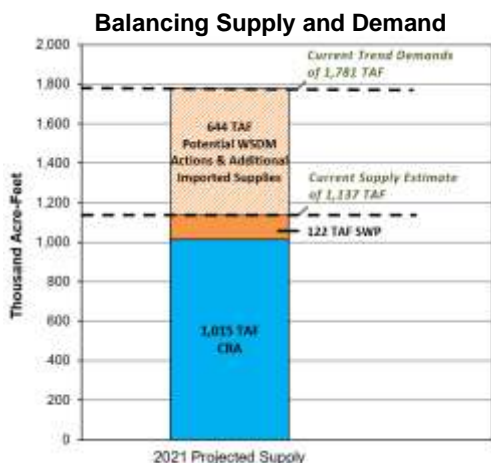
MANAGING SUPPLIES AND DEMANDS

Supply/Demand Balance	Acre-Feet
Total Supplies	1,137,000
Total Demands	1,781,000
Current Balance Estimate	-644,000

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 (e.g. Lake Mead ICS account, SWP Carryover storage, SWP Banking Programs, SWP Flexible storage accounts, in-region surface reservoirs).
- Purchasing an estimated 37 TAF (26 TAF after losses) 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.
- The Operational Shift Cost-Offset Program agreement is in place with the Los Angeles Department of Water and Power. LADWP began shifting deliveries in July. Metropolitan is exploring other opportunities to shift to Colorado River service connections with Upper San Gabriel Valley Municipal Water District, Three Valleys Municipal Water District, and Eastern Municipal Water District.



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	101,000	1,657,000
Lake Mead ICS	1,293,000 ²	101,000 ³	1,657,000
State Water Project System	1,052,000	495,000	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	0 ⁵	350,000
Semitropic Storage Program	261,000	42,000	350,000
Kern Delta Storage Program	177,000	27,000 ⁶	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	499,000	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) ⁷	41,000	38,000	210,000
Other Programs	694,000	56,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	313,000	56,000	800,000
Total	3,911,000	1,151,000	5,963,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) ⁸	3,161,000	1,151,000	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. Accounting will be updated once deliveries are reconciled.

⁶ Reduced by 13 TAF due to dry conditions impacting the exchange.

⁷ Total of all CUP programs including IEUA/TVMWD (Chino Basin); Long Beach (Central Basin); Long Beach (Lakewood); Foothill (Raymond and Monk Hill); MWD OC (Orange County Basin); Three Valleys (Live Oak); Three Valleys (Upper Claremont); and Western.

⁸ Total WSDM Storage level subject to change based on accounting adjustments.

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

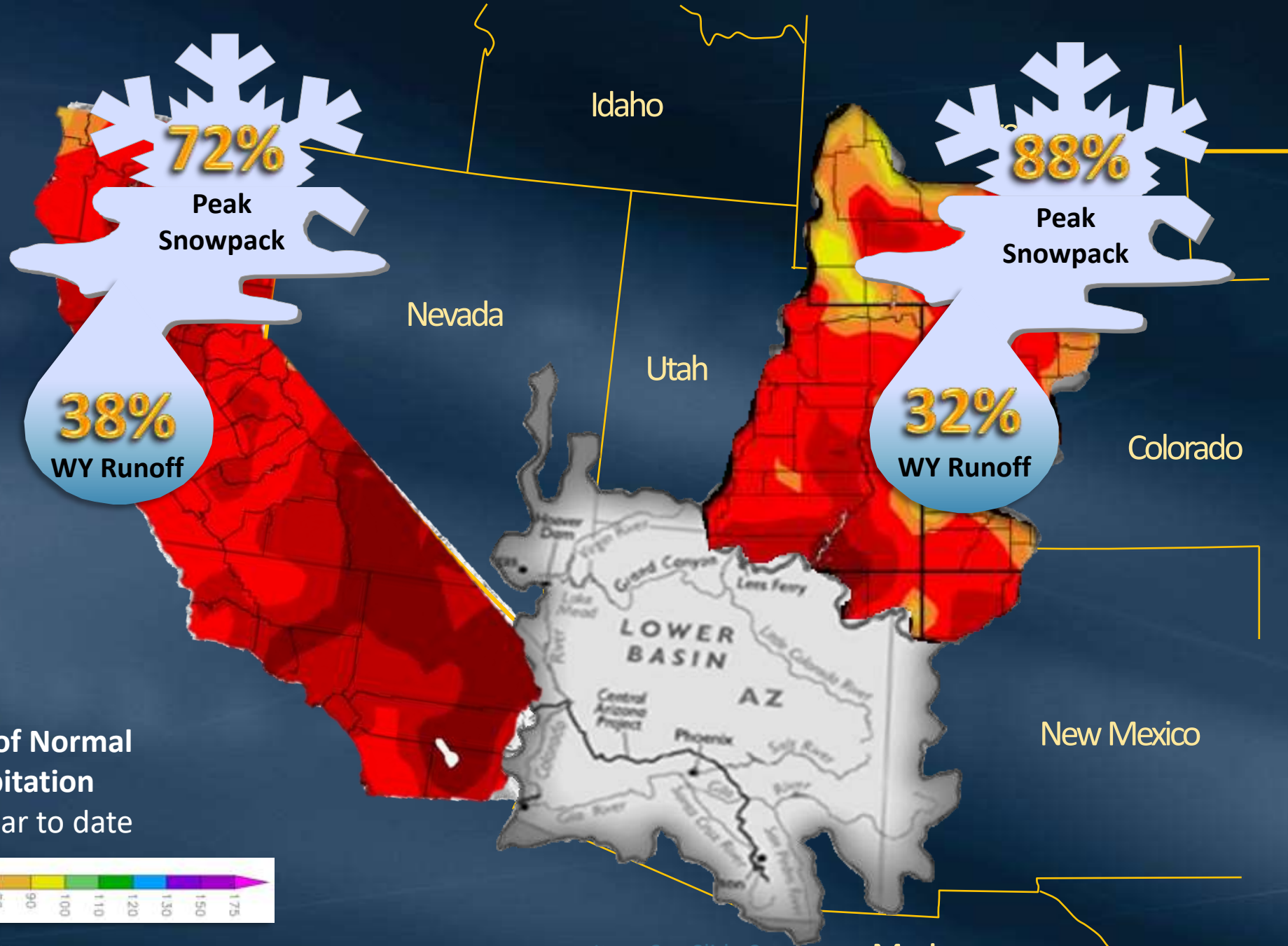
Water Planning and Stewardship Committee

Item 6a

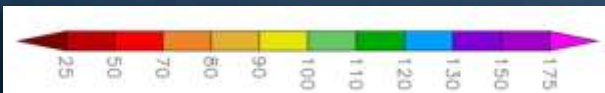
August 16, 2021

Outline

- Water Supply Conditions and Outlook
- State Actions in Response to Drought
- Supply/Demand Balances
- Water Surplus & Drought Management Actions



Percent of Normal
Precipitation
Water Year to date



Consecutive dry years taking its toll on imported water supply systems

- Snowpack in both imported water supply watersheds did not produce expected runoff
 - SWP allocation decreased from 10% to 5%
 - Colorado River Basin has been in a drought since 2000
- Second lowest runoff projected in the Upper Colorado River Basin
- Fourth lowest runoff projected for Northern Sierra



Lake Oroville storage drops to a record low on August 1



April 2021



July 2021



August 2021: Hyatt Power Plant Intake Structure – Lake Oroville

Lake Mead storage continues to drop to historic low levels



Bleak outlook for both imported water supplies

- Anticipating a zero percent initial 2022 SWP Allocation
 - Oroville storage may end the year at record low levels
 - Roughly even chance of receiving 20 percent or greater SWP Allocation for 2022
- Shortage declaration imminent for Lower Colorado River Basin
 - Reclamation's 24-Month Study continues to show Lake Mead and Lake Powell at historically low elevations and dropping
 - Shortage would go into effect in 2022

Statewide drought actions

- Currently 50 counties in drought emergency
 - Does not include the six counties in MWD service area
- SWRCB taking actions to preserve water supply in Shasta and Lake Oroville and protect the delta from salt water intrusion
 - Temporary Urgency Change Petition
 - Salinity Barrier installation
 - Water Unavailability Notice for Delta watershed water right holders
- On July 8, Governor Newsom issued an Executive Order calling for all Californians to voluntarily reduce water use by 15 percent from 2020 levels





Governor's call for voluntary reduction: an opportunity to show SoCal is part of the solution

- Southern California reduced water use over three decades, and especially since the last drought
- Governor's call for voluntary reductions departs from a "one size fits all" solution
- Voluntary action taken now supports the Administration, helps preserve regional storage, and prevents need for more stringent measures later
- Southern California can take forward-looking actions to address the current drought and not solely rely on past investments

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

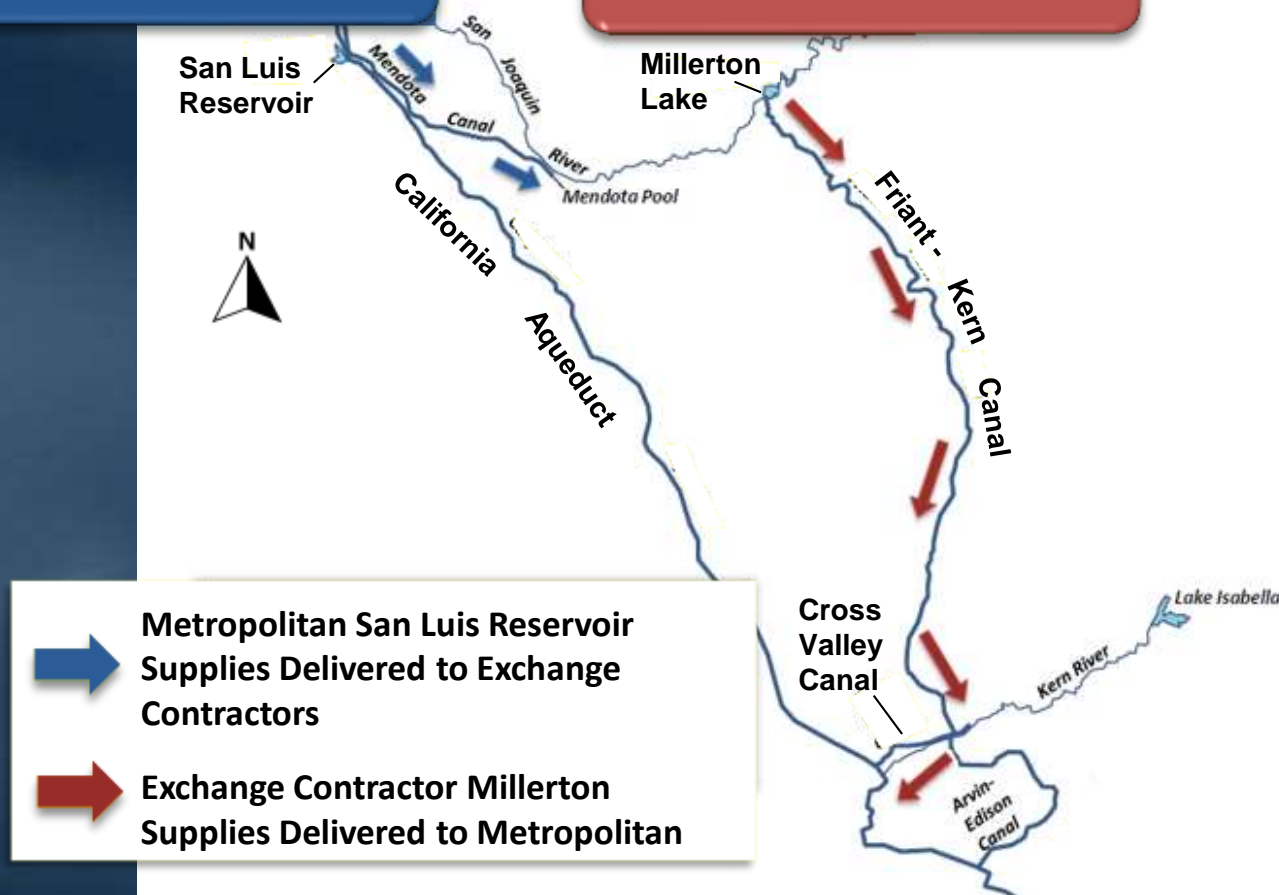
May 2021	Jun 2021	Jul 2021	Aug 2021
<p>Board approved new Operational Shift Cost Offset Program (OSCOP)</p>	<p>Greg Avenue pumping station tests completed and began operation</p>	<p>West Basin MWD began shifting demands</p>	<p>Began receiving exchange of surface water supplies from the Arvin-Edison Storage Program</p>
<p>Lakeview Pipeline improvements completed</p> 	 <p>Amended agreement with DWR to increase stated max flow rate for DVL to Mills Plant operation</p>	<p>LADWP began shift through OSCOP</p>	<p>Continue to discuss OSCOP potential with other member agencies</p>
<p>DVL to Mills Plant in operation for the first time in Metropolitan's history</p>			

Arvin-Edison Exchange/Recovery

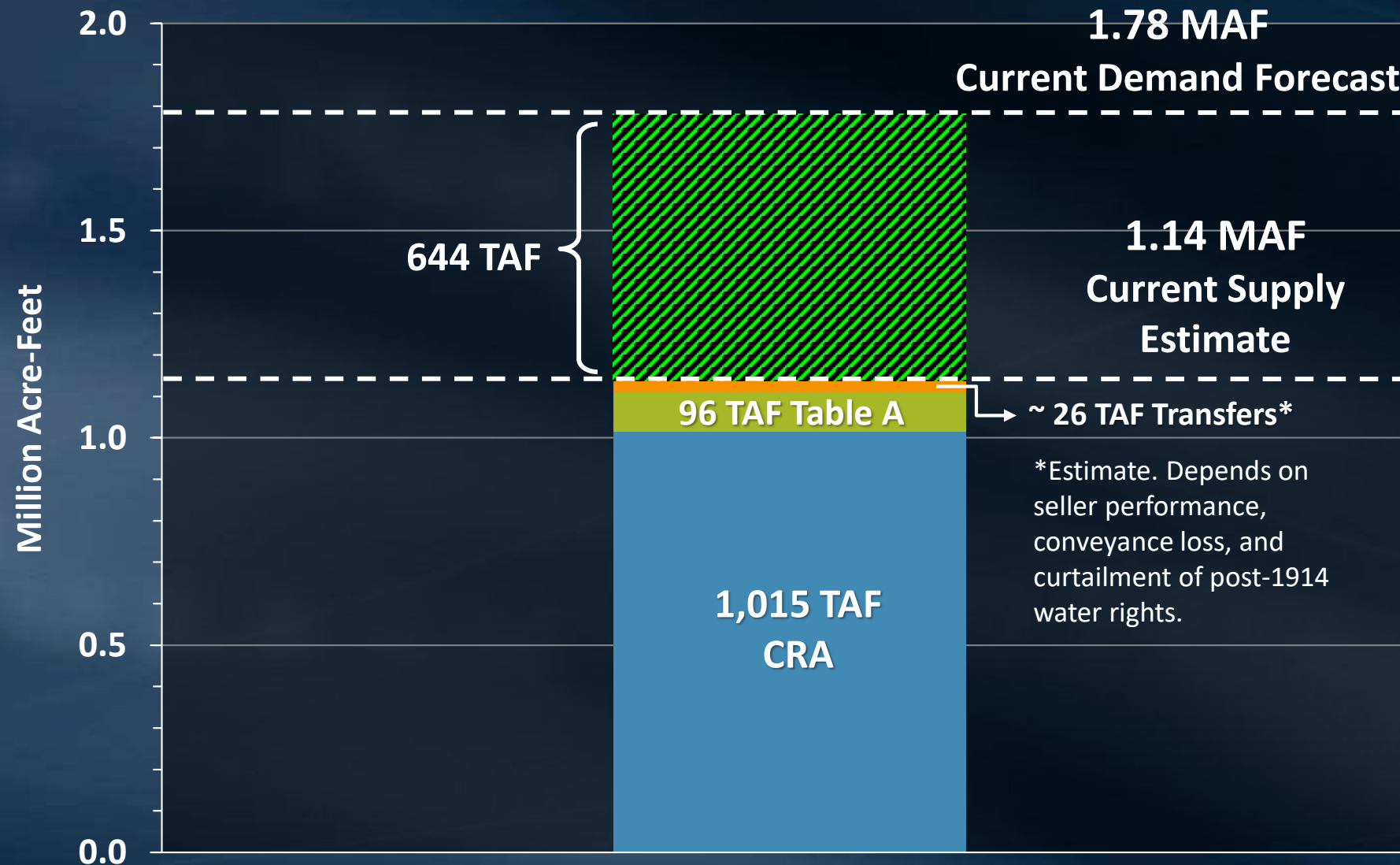
Exchange of Supplies between Metropolitan and Exchange Contractors

Put 9,000 AF to Arvin-Edison
for Exchange Contractors

Return 10,000 AF of surface
water from Arvin-Edison

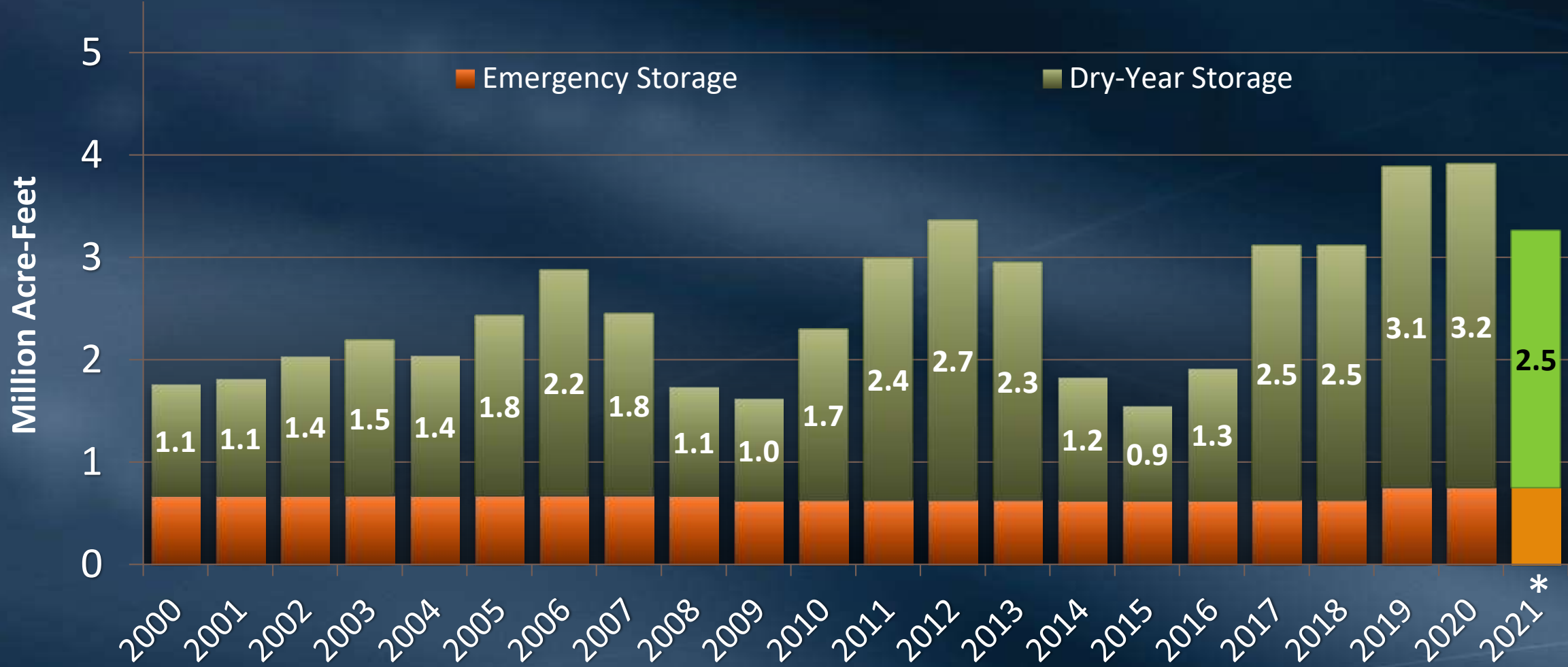


Drafting Storage in 2021 for Supply/Demand Balance



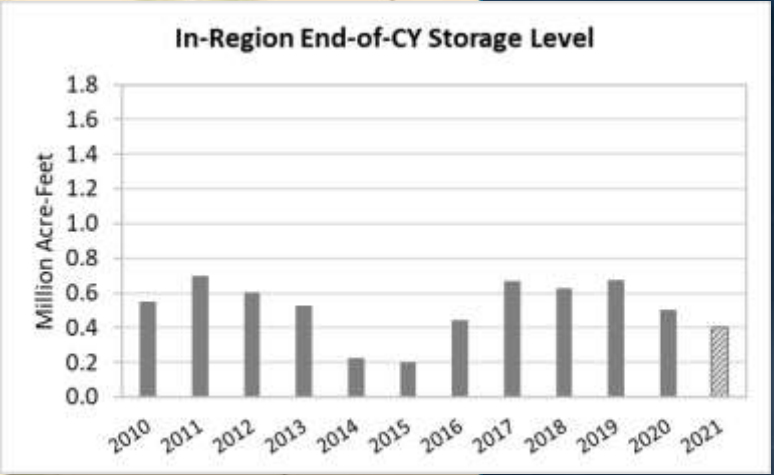
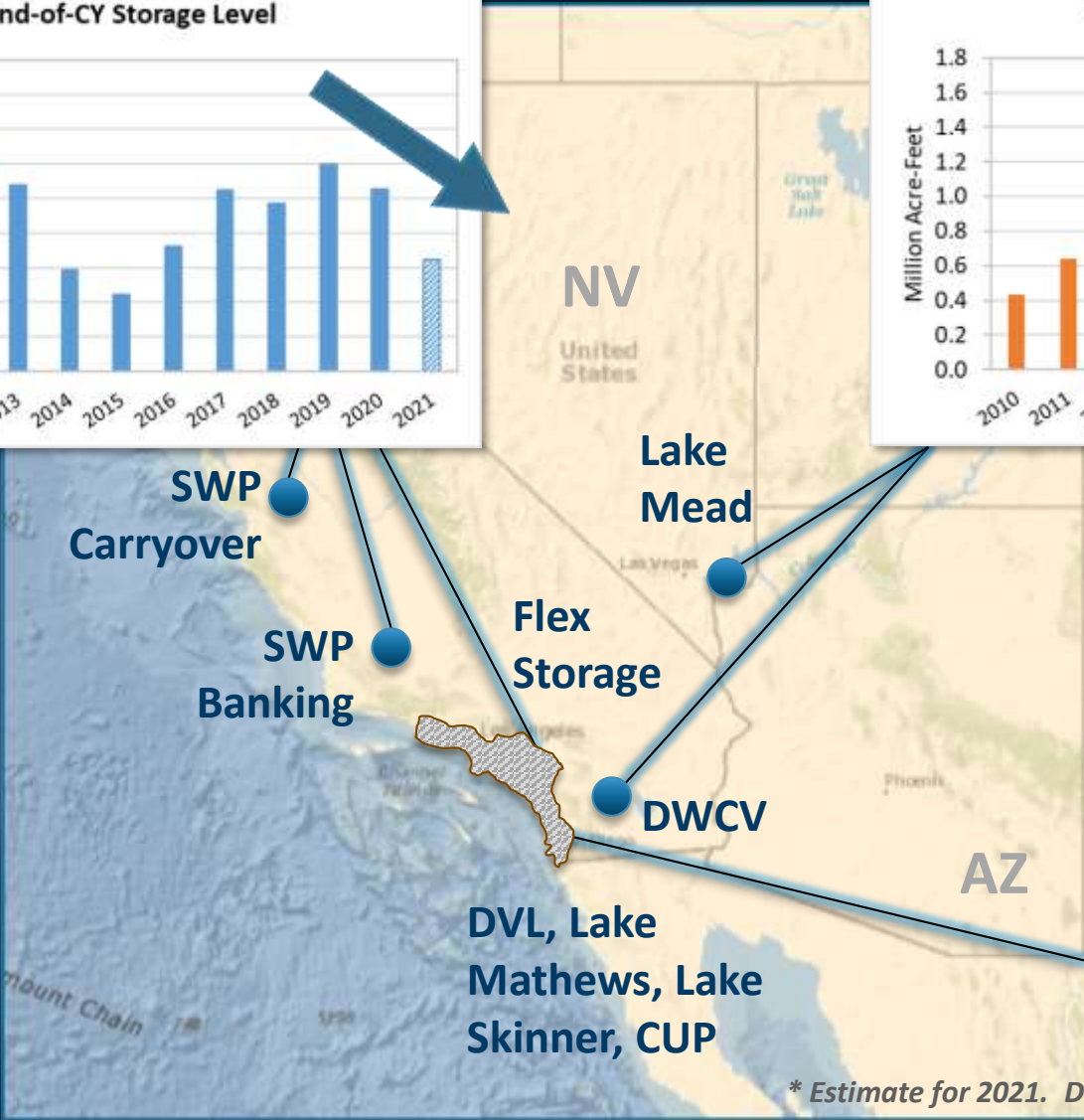
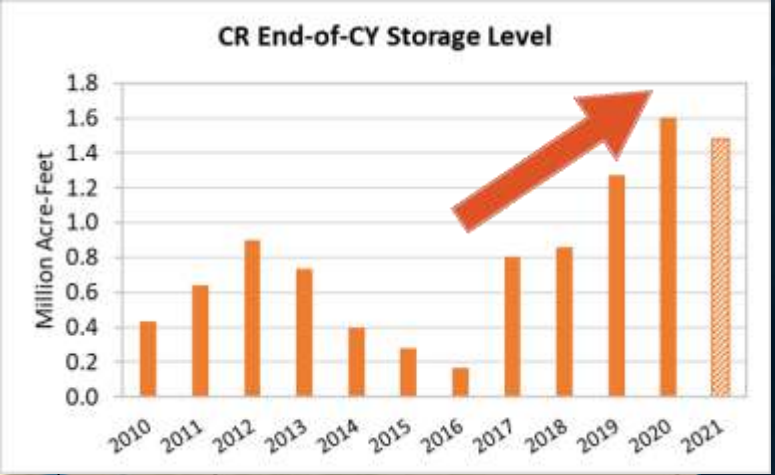
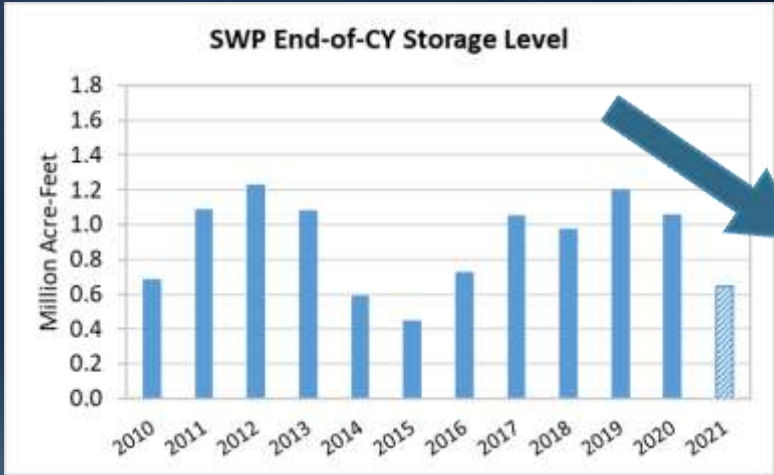
Metropolitan Storage Balances

End of Year Balances



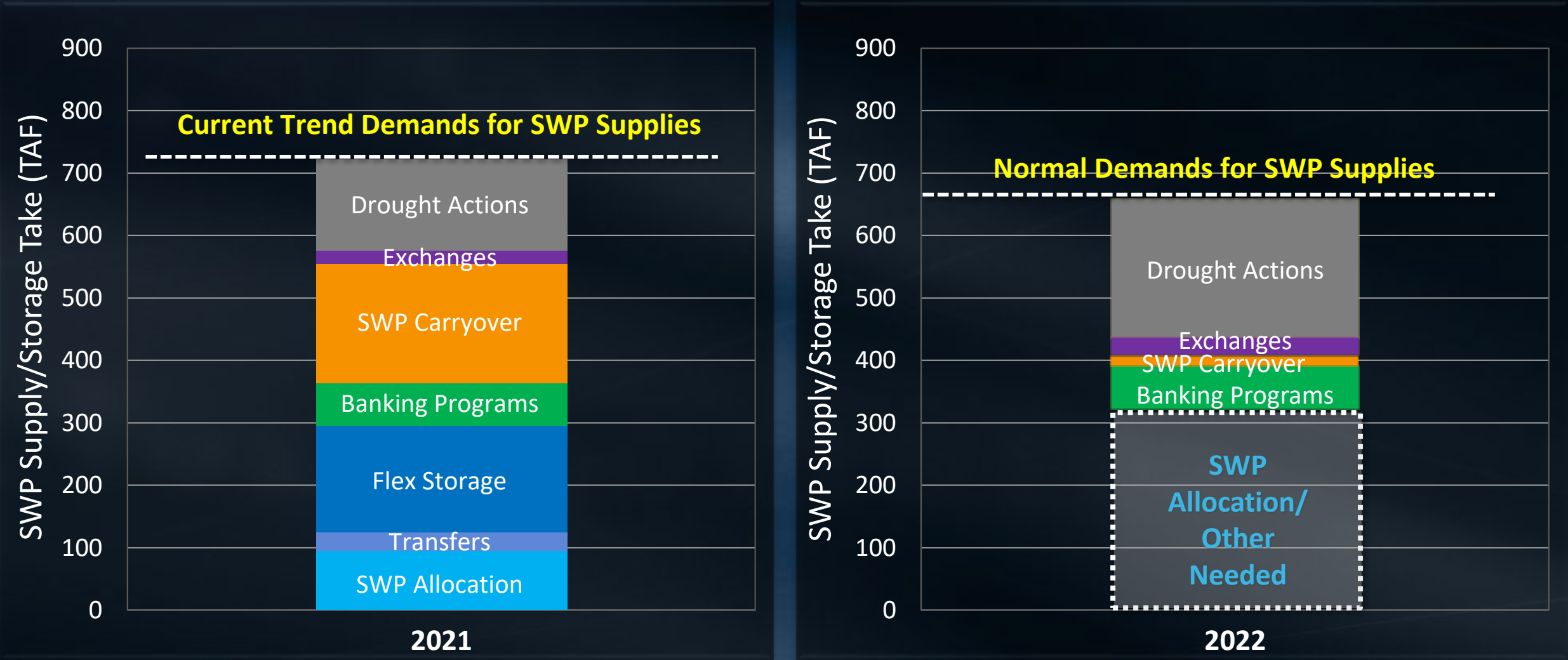
* Estimate – May change based on supply/demand conditions

Storage in SWP Accounts is Falling*



* Estimate for 2021. Does not include emergency storage.

Plausible near-term planning scenario for Metropolitan's SWP Exclusive Area



Moving to a Water Supply Alert is the logical next step to facilitate the region's continued water use efficiency successes

- bewaterwise.com
- Residential Programs
 - Turf Replacement Program
 - Indoor and Outdoor Device Rebates
- Commercial Incentives
 - Indoor and Outdoor Device Rebates
 - On-Site Retrofit Program
 - Water Savings Incentive Program







Report on Upcoming Colorado River Negotiations

Water Planning and Stewardship Committee
Item 6b

August 16, 2021

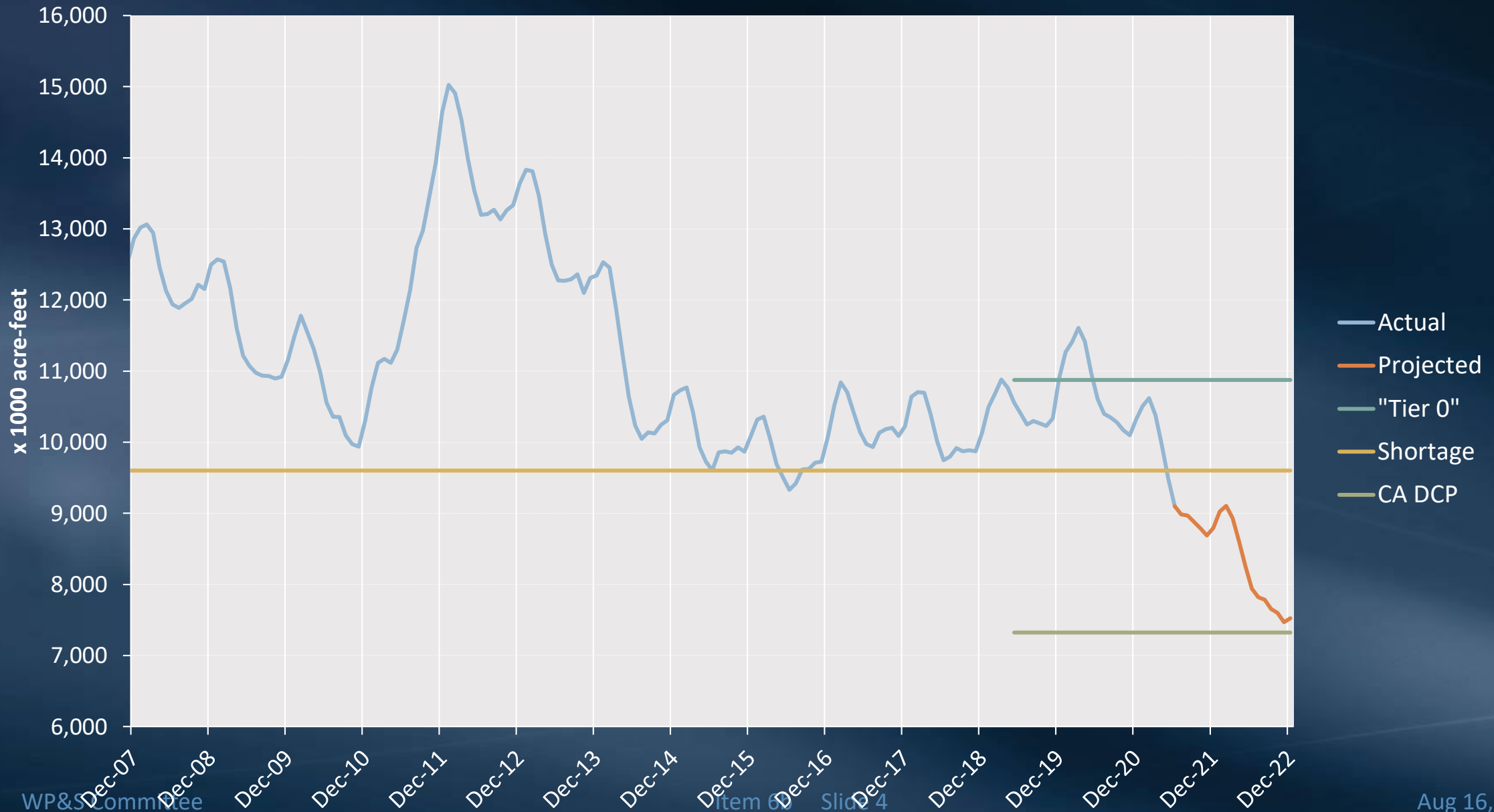
Overview of Report

- Current Conditions
- Scope of Upcoming Negotiations
 - New Colorado River Guidelines
 - Near-term Drought Response Actions
- Process for Receiving Board Direction

Powell, Mead, Oroville all at Record Low Levels



Lake Mead Storage 2007 - 2022



Upcoming DOI Determinations

- Shortage Declaration for 2022
 - 330,000 AF Total Cut to Arizona, Nevada
 - 200,000 AF of DCP contributions also required
 - Mexico's Supplies Reduced by 50,000 AF
 - 30,000 AF of contributions also required
 - Total Lower Basin Reduction: 610,000 AF
 - No California Shortage, may withdraw ICS

Upcoming DOI Determinations

- Anticipate Reaching DCP Consultation Trigger
 - If any 24-Month Study projects Lake Mead reaching 1,030' in two Years, the Secretary and Lower Division States shall consult and determine what additional measures will be taken by the Secretary and the States to avoid and protect against the potential for Lake Mead to decline below 1,020'.

Current Drought Response

- PVID System Conservation Agreement
 - Funded by USBR, CAP, SNWA, Metropolitan
 - PVID Fallowing Increased by 60,000 AF/yr
 - In addition to MWD's existing fallowing call
 - Three-year program; first year voluntary
 - Program will add about 3 feet to Lake Mead
- Agencies Considering Similar Agreement for Bard Seasonal Fallowing Program

Additional Potential Short-term Drought Actions Being Explored

- Funding Additional Agricultural Conservation
- Increasing ICS Storage Space in Lake Mead
- Operation of Yuma Desalting Plant
- Partner with Mexico for Additional Conservation
- Fund Urban Conservation/Local Resources

Development of New Colorado River Guidelines



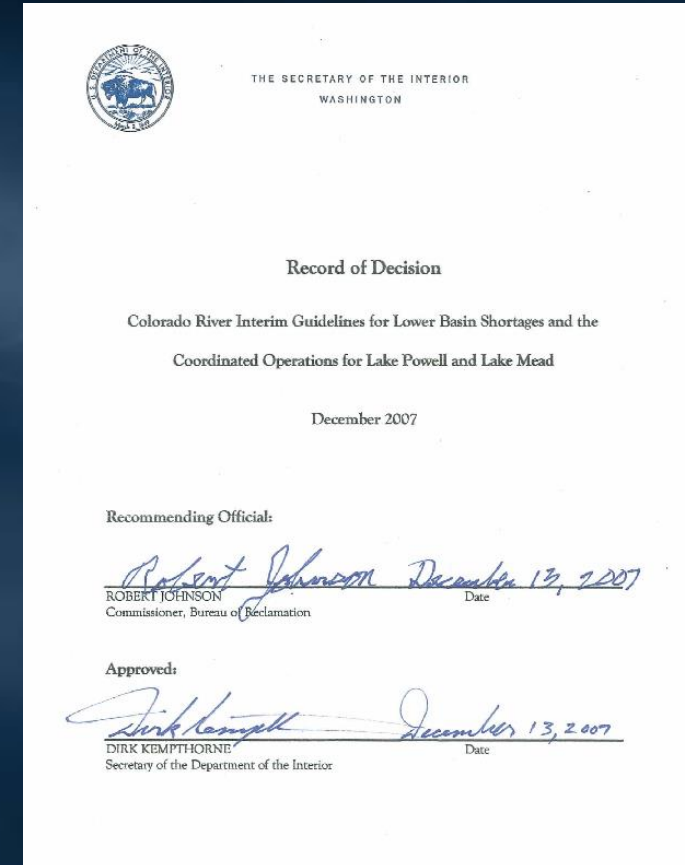
2005 Lower Colorado River Multispecies Conservation Plan

- Key MSCP Provisions
 - Provides CESA/ESA Coverage for Current and Future Water and Power Operations
 - 50 year Program
 - Develops Critical Habitat for Endangered Species



2007 Interim Guidelines

- Effective through 2026
- Key Guidelines Provisions
 - Established Lower Basin Surplus and Shortage Triggers
 - Coordinated Reservoir Operations
 - Developed Intentionally Created Surplus (ICS)



Cooperative Minutes with Mexico

- Key Provisions of Minutes
 - Mexico shares in surplus and shortage
 - Mexico may store water in US Reservoirs
 - US agencies, Mexico partner to conserve water
 - Environmental flows to Colorado River Delta



2019 Colorado River Drought Contingency Plan

- Key DCP Provisions
 - Established triggers for Lower Basin Lake Mead Contributions
 - Incentivized Storage
 - Provided flexibility for recovering storage, implementing exchanges



Looking Towards New Guidelines

- Interim Guidelines (incl. DCP) Terminate in 2025
 - Mexico's related minutes also expire
- Tasks to Complete New Guidelines
 - DOI Completion of EIS Process, ROD
 - Companion Minutes with Mexico
 - Develop Implementing Agreements
 - Increase Lower Colorado MSCP Compliance
 - Obtain Federal Legislation (anticipated)

Staff Assisting in Negotiations

- Manager, Colorado River Resources
- Colorado River Policy Manager
- Senior Policy Advisor, Colorado River
- Colorado River Hydrologic Modelers
- Legal Department
- External Affairs
- Executive Management

Obtaining Board Direction

- Provide Regular Updates to WPS Committee
 - Inform Committee of Key Milestones/Decisions
 - Consider Board Workshop(s)
 - Ad Hoc Committee option if needed/desired
- Seek Input to Update/Develop Colorado River Guiding Policies

Potential New Colorado River Board Policies

To What Extent and Under What Conditions will Metropolitan:

- Share in Colorado River Delivery Reductions
- Allow Interstate Investments in and Sharing Yield from Water Recycling or Desalination Projects
- Pursue and Share Storage Opportunities
- Purchase Agriculture Land

Next Steps

- Begin Obtaining Board Input for Colorado River Policies
 - Land Purchase Policy Discussion in Sept.
- Collaborate with other Stakeholders to Develop Short-term Drought Response Options
- Evaluate Options to Address Anticipated Long-term Demand/Supply Gap
- Determine Additional MSCP Coverage Needed
- Develop Plan Consistent with Board Principles





Overview of Preferential Rights

Water Planning & Stewardship Committee

Item 6c

August 16, 2021

Topics Covered

- Statutory Language, Purpose and Intent
- Legislative History
- Historical Issues, Discussions and Proposals
- Court Decisions
- Current Status
- Relationship to Other Laws and MWD Allocation Plans

Statutory Language, Purpose and Intent

MWD Act Section 135

Provides each member agency with:

- Preferential *right to purchase water* from MWD
- For domestic and municipal *use within that agency's service area*
- In an *amount proportional* to:
 - Agency's total payments to MWD for capital and operating expenses relative to those made by other member agencies
 - Excluding any payments made toward the purchase of water

The Calculation



Total Capital and Operating
Expense Payments
[Excluding Water Purchases]



$\times 100 = \% \text{ PR}$



All MA

Total Capital and Operating
Expense Payments
[Excluding Water Purchases]

Purpose and Intent

- Intended to provide *measure of protection* for financial investment being made by original MAs
 - Collection of tax revenues commenced before CRA deliveries
 - City of LA provided majority of tax revenues, though it had access to imported supplies from Owens Valley
- *Did not create “entitlement”* to MWD water supplies
- Akin to “right of first refusal” to purchase water

Legislative History

Legislative History

1927

- Section 5½ enacted
- Provided PR to purchase water "served by the district"
- Calculation based on **assessed property valuation** within MA boundaries relative to district as a whole

1931

- Section 5½ amended
- Calculation based on **total payments made** by MA toward capital and operating expenses "**excepting purchase of water**" relative to all other member agencies

- ✦ Official Statement: “This accumulation feature tends to keep the ratios constant, and to minimize the effect of more rapid increase of assessed valuation in certain cities.”
- ✦ Underlying Concern: City of LA would “hog” all the water in times of shortage
- ✦ Lingering Issue: Exclusion of water purchases meant that PR calculation did not necessarily reflect actual “reliance” on MWD

Legislative History

1927

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- Calculation based on **assessed property valuation** within MA boundaries relative to district as a whole

1931

- Section 5½ amended
- Calculation based on **total payments made** by MA toward capital and operating expenses "**excepting purchase of water**" relative to all other member agencies

1969

- MWD Act repealed and reenacted
- Section 5½ now within **Section 135**
- No significant changes

Issues, Discussions and Proposals

Principal Issues



Principal Issues

Outside Uses

- Statute: “use within such city” / “use within the agency”
- Policies/Admin Code: Water use generally limited to portion of MA service area lying within District

Allowable Uses

- Statute: “for domestic and municipal purposes”
- Admin Code: In 1970, term defined to include “use of water for all domestic, municipal, commercial, industrial, and recreational purposes”

Annexation Fees & Charges

- Statute: “total accumulation of amounts paid”
- Policies/Admin Code: annexation fees and charges required to be paid up front

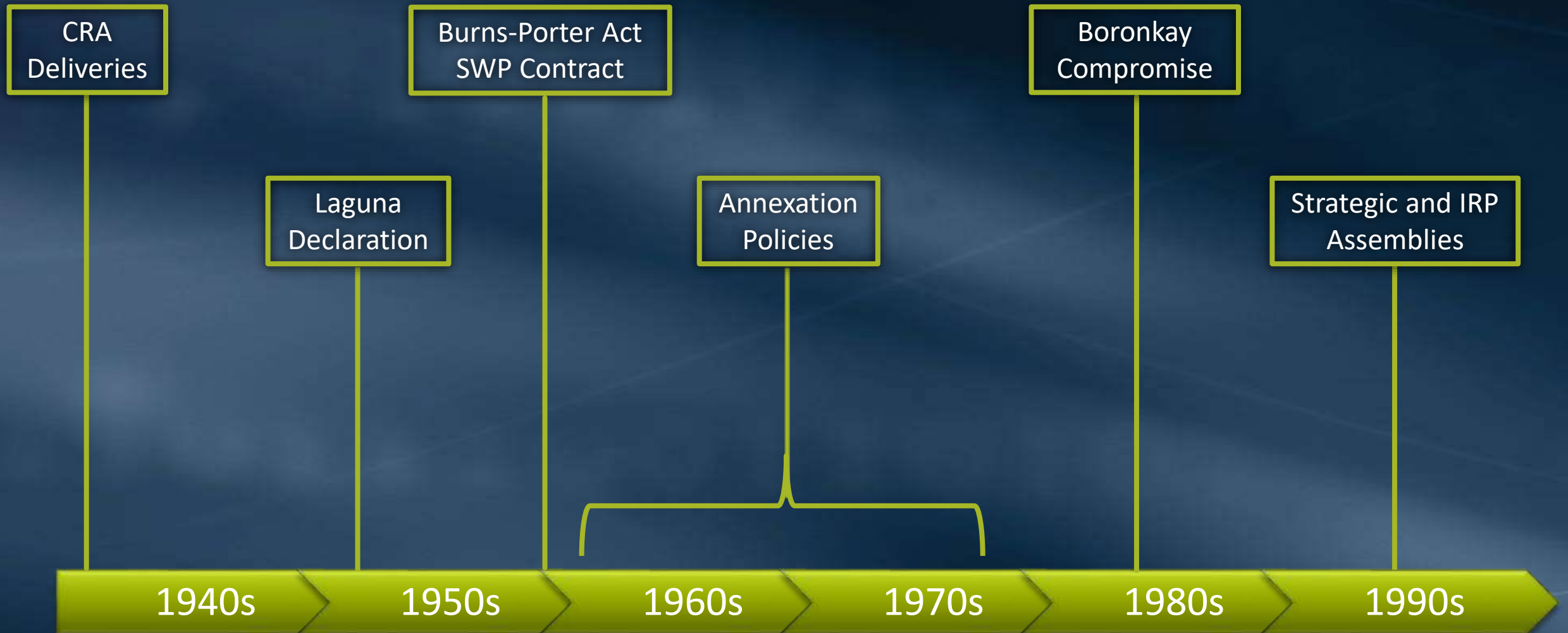
“Excepting Purchase of Water”

- Meaning and scope of term has engendered *most debate and controversy* with respect to PRs
- Raises *issues of perceived equity* and fairness among MAs
- Only area where PRs have been *subject of litigation*

“Excepting Purchase of Water”

- Issue *discussed many times* in various contexts
- Issue resurfaces *when changes are made or proposed* to District’s rate structure or allocation of costs

“Excepting Purchase of Water”



“Excepting Purchase of Water”

- Issues *discussed many times* in various contexts
- Issue resurfaces *when changes are proposed or made* to District’s rate structure or allocation of costs
- *Various approaches for revising PR calculation* have been proposed and debated
- *No consensus* has been reached

Court Decisions

Court Decisions

- SDCWA v. MWD (2004):
 - Challenge filed in 2001 involving bundled rate structure
 - MWD successfully demurred to complaint
 - Issue: Whether portion of water sales revenues used to pay MWD's capital and O&M costs should be included in PR calculation
 - Held: Statutory context / legislative history “clearly contemplated” water sales revenue would be used to pay such costs and should be excluded from calculation of PRs

Court Decisions

- SDCWA v. MWD (2017):
 - Challenges filed in 2010 and 2012 involving unbundled rate structure (“rate cases”)
 - PRs was one of many claims
 - Issue: Whether payments made by SDCWA to MWD pursuant to Exchange Agreement should be included in PR calculation
 - Held: Payments must be included in PR calculation; terms of Exchange Agreement made clear SDCWA was not purchasing water from MWD

Current Status

Current Status

- Text of Section 135 as amended in 1931 *remains operative*
- Volumetric charges *generally excluded* from calculation of PRs
- Calculation currently *includes taxes, RTS and capacity charges,* and certain other payments made by MAs

Fiscal Year 2019-2020 Member Agency Preferential Rights

Member Agency	Preferential Right (FY19-20)
SDCWA	25.8%
Los Angeles	18.1%
MWDOC	12.4%
West Basin MWD	7.1%
Central Basin MWD	5.5%
Calleguas MWD	4.0%
Eastern MWD	3.7%
Western MWD	3.6%
Upper San Gabriel Valley MWD	2.9%
Three Valleys MWD	2.7%
Inland Empire Utilities Agency	2.5%
Long Beach	2.1%
Glendale	1.1%

Member Agency	Preferential Right (FY19-20)
Pasadena	1.0%
Torrance	1.0%
Anaheim	1.0%
Beverly Hills	0.9%
Las Virgenes MWD	0.9%
Burbank	0.8%
Santa Monica	0.8%
Santa Ana	0.7%
Foothill MWD	0.6%
Fullerton	0.5%
Compton	0.2%
San Marino	0.2%
San Fernando	0.1%

Relationship to Other Laws and MWD Allocation Plans

Relationship to Other Laws

- Preferential rights are *not absolute*
- Exist within *complex framework of laws* governing conservation and use of water within California
 - Often related and intertwined
 - Likely to come into play under similar circumstances
- Many *adopted after enactment* of preferential rights statute

Relationship to Other Laws

Cal. Const. Art. X, § 2
(1928)

Water Code § 100 *et seq.*
(1943)

- Requires beneficial use of water “to the fullest extent possible”
- Prohibits “waste or unreasonable use”
- What constitutes “reasonable and beneficial” use changes over time

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

Relationship to Other Laws

UWMP Act (1983)

- Requires preparation of UWMPs every five years
- Water shortage contingency plans (WSCPs) key component
- WSCPs must contain statement that supplier “shall declare a water shortage emergency” pursuant to WC§350 if warranted

Emergency Proclamations / Executive Orders

- Issued by Governor
- Typically focus on state agencies, but may contain directives affecting local agencies, private entities and residents
- Includes authority to temporarily suspend any local statutes, ordinances and regulations under certain circumstances

Relationship with MWD Allocation Plans

Preferential Rights **have never been utilized** in allocating supplies

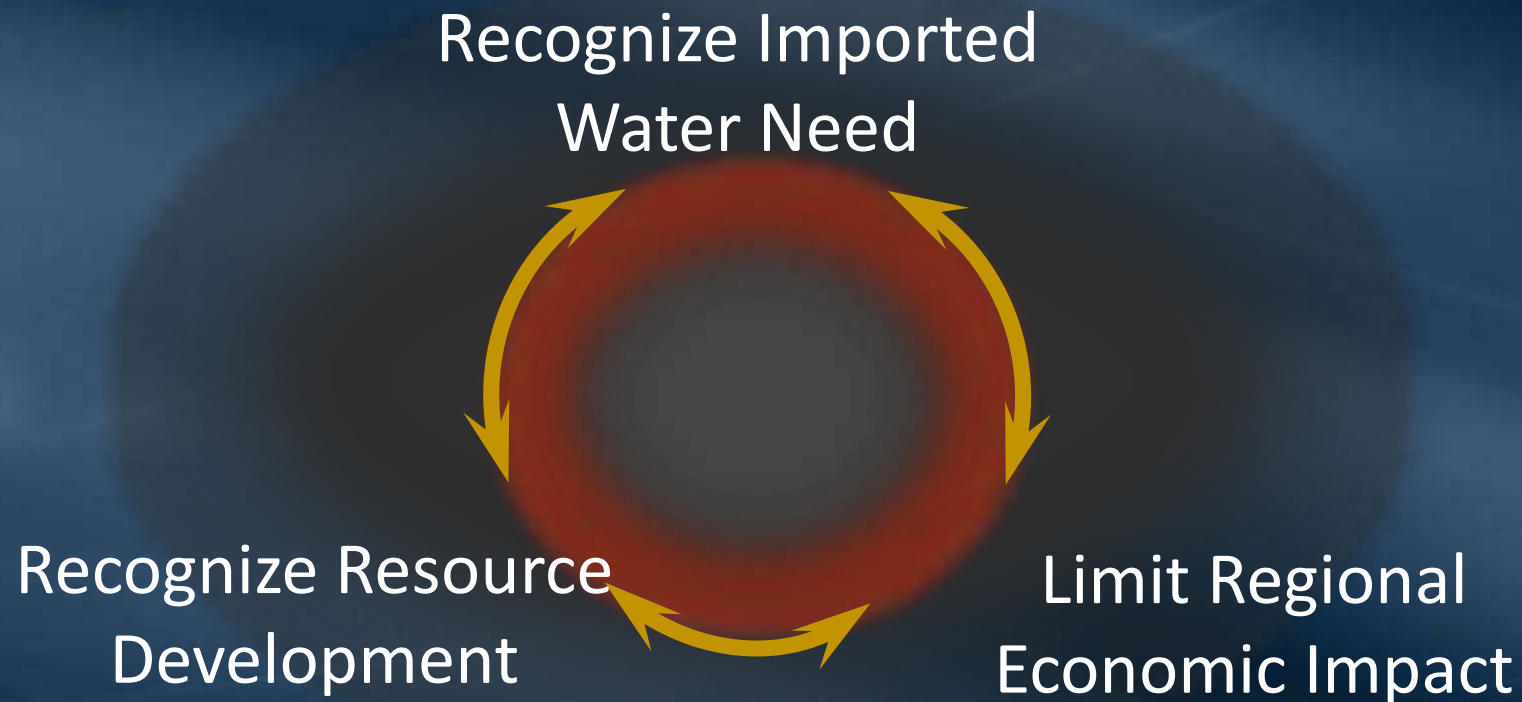
Alternatives have worked in times of shortage

IICP (1990's)

WSDM: (1999-present) / WSAP (2008-Present)

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 *approach for allocating available supplies* to MAs in times of water shortages
- Is needs-based and seeks to *maintain equity among MAs* and minimize impacts on region.
- Accounts for:
 - MA's relative dependence on MWD
 - Population and economic growth
 - Local supply investments
 - Changes in local supply conditions; and
 - Demand hardening impacts from recycled water use and conservation

Relationship with MWD Allocation Plans

Preferential Rights **have never been utilized** in allocating supplies

Alternatives have worked in times of shortage

IICP (1990's)

WSDM: (1999-present) /WSAP (2008-Present)

PRs **calculate a MA's potential share** of available supplies;
WSDM/WSAP **incentivize reduction in overall demand** to preserve total supplies





• Colorado River Management Report

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month July 2021.

Purpose

Informational

Detailed Report

Delivery of Supplemental Water to Lake Powell Under Upper Basin Drought Contingency Plan

The U.S. Bureau of Reclamation (Reclamation) made additional releases from three reservoirs in the Upper Basin in the amount of 181,000 acre-feet pursuant to the terms in the Drought Response Operations Agreement (DROA), part of the Upper Basin's Colorado River Drought Contingency Plan. The additional releases are expected to augment Lake Powell's elevation by approximately three feet. In consultation with the Upper Division States, Reclamation found that the additional releases should be made after the July 24-Month Study showed that unregulated inflow has decreased 2.5 million acre-feet in the six-month period between January and July 2021. The current forecast for water year 2021 is for total inflow into Lake Powell of just 3.23 million acre-feet, 30 percent of the thirty-year average. Further, five-year projections predict a 79 percent chance that Lake Powell will fall below the DROA target elevation of 3,525 feet within the next year. That elevation provides a thirty-five-foot buffer above the elevation of 3,490 feet, the minimum power pool at Glen Canyon Dam. In a statement that accompanied the additional DROA releases, Reclamation stated its commitment to reducing the collective risk of Lake Powell and Lake Mead falling to critical elevations.

Annual Operating Plan Consultation for 2022 – First Shortage Declaration Expected in August

Reclamation held the second of three annual consultation meetings regarding its Annual Operating Plan for Colorado River reservoirs (AOP) for 2022. Each year Reclamation prepares an AOP that reports on operations of the Colorado River reservoirs during the past year, and projects operations and releases for the current year based on current and projected reservoir elevations and hydrologic conditions throughout the basin. Based on current and projected conditions, the Secretary of the Interior will make the first Shortage Declaration for the Lower Basin after the August 24-Month Study has been issued on or around August 16, 2021. The Shortage Declaration will trigger reductions in the amount of water that may be diverted by Arizona and Nevada. California does not take shortages. The Shortage Declaration will also trigger water savings contributions pursuant to Minute 323. Projected 2022 Operations show that Lake Powell will be in the Mid-Elevation Release Tier, resulting in a 7.48 million acre-feet release from Glen Canyon Dam. Intentionally Created Surplus may be created or delivered, so that Metropolitan can fill the Colorado River Aqueduct if needed in 2022. Due to the anticipated shortage, accumulation of inadvertent overruns will be suspended. Developed shortage supply may be created and delivered in calendar year 2022. The final AOP consultation meeting is scheduled on August 31, 2021.



● Bay-Delta Management Report

Summary

This report provides a summary of activities related to the Bay-Delta for July 2021.

Purpose

Informational

Detailed Report

Long-Term Delta Actions

Delta Conveyance

The California Department of Water Resources (DWR) is continuing to develop an Environmental Impact Report (EIR) under the California Environmental Quality Act.

DWR conducted the first of four technical webinars to inform the public and interested stakeholders about the current progress related to preparation of the Draft EIR. The first webinar on July 14 provided the public information on the operations of the State Water Project and Delta Conveyance. The remaining three webinars will continue to feature presentations from technical staff about the approaches, methodologies, and assumptions to be used in conducting impact analyses in the Draft EIR. All webinars are recorded and will be made available on DWR's website. Information about impact findings and specific mitigation measures is not available at this time but will be included in future outreach efforts following publication of the public Draft EIR. More information regarding the webinars is available on DWR's website.

Joint Powers Authorities

During the July 15, Delta Conveyance Design and Construction Authority Board of Directors Meeting, the board approved an initial budget adjustment for fiscal year (FY) 2021/22. The budget change increased the adopted FY 2021/22 budget from \$21.5 million to \$23.5 million using funds remaining from last FY.

The Delta Conveyance Finance Authority (DCFA) regularly scheduled July meeting was cancelled.

Sites Reservoir

In July meetings, the Sites Project Authority Board and the Sites Reservoir Committee authorized the release of the Revised Draft EIR/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS), including authorizing the Executive Director to file a Notice of Completion with the State Clearinghouse and complete other noticing requirements to initiate the public review process. Release of the RDEIR/SDEIS to the public is anticipated in late August 2021.

Near-Term Delta Actions

Regulatory Activities

Staff continued to participate in the collaborative groups called for in the 2019 Biological Opinions for the State Water Project (SWP) and Central Valley Project, and in the 2020 Incidental Take Permit (ITP) for Long-term Operation of the SWP, to address science needs and inform management and operation of the water projects. In July, staff continued work with state and federal agencies to develop a Juvenile Production Estimate for Spring-run Chinook salmon as a condition as required by the ITP. Current efforts are focused on developing a problem statement through focused discussions on what triggered the problem, why a decision must be made, and why the decision matters. These discussions are to ensure that the multiple state, federal, and water agencies participating in this effort all agree on why we need to develop a monitoring program to estimate juvenile production of spring-

Board Report (Bay-Delta Management Report)

run, and agree on what the goals and objectives of this effort are before working on the details of a monitoring program. In August 2021 a final version of the problem statement will be circulated to the group for approval.

Science Activities

Staff continued collaboration with the State Water Contractors (SWC) Science Program. On July 15, the SWC released its FY 2020/21 Science Report ([FHA200621_SWC_Annual_Report_Fact_Sheet_C3.indd](#)) highlighting the importance of investing in research to provide a more reliable water supply for California while protecting, restoring and enhancing the Sacramento-San Joaquin Bay-Delta ecosystem.

Staff also continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). At the July 20 meeting, CAMT discussions focused on the potential roles and responsibilities of a proposed Delta smelt science program manager that would assist CAMT with the interface between the investigators who generate the science and the managers who use the science. CAMT also discussed a possible approach to develop recommendations regarding Delta monitoring needs.

Staff is leading a CSAMP effort to collaboratively develop a scientific definition of salmon recovery, expressed as a suite of clear, measurable objectives and landscape level quantitative targets. Staff is planning and participating in a series of technical workshops with experts in salmonid ecology to develop this definition. Some of the outcomes of those workshops include: (1) the decision to use the viable salmonid population (VSP) concept as a base for establishing objectives for recovery of salmonids in a broad sense; (2) identification of four parameters that are key to evaluating population viability status -- abundance, population growth rate, population spatial structure, and diversity; (3) agreement that goals to recover salmon should go beyond delisting of the species and include supporting long-term harvest; (4) that goals should be distinguished between fish of hatchery and non-hatchery origins; and (5) that the group consensus on these goals is desired. The workshop participants will reconvene in October 2021 to review, complete, and finalize these objectives.

UC Davis researchers completed a study funded by Metropolitan to develop methods for identifying the sources of important zooplankton food for juvenile Chinook salmon. The researchers analyzed the feasibility of using genomic sequencing, a laboratory procedure that determines the unique DNA fingerprint of an organism, to identify which floodplains are the source of *Daphnia pulex* (*D. pulex*), which is an important zooplankton food resource for juvenile Chinook Salmon. They observed that *D. pulex* from the Butte, Knaggs, and Cosumnes basins have a genetic signature that is distinctive and clearly differentiated from one another. These results could ultimately be applied to quantify production and export of fish food generated in off-channel habitats, such as floodplains, and evaluate how the fish food moves through the system under a variety of management actions such as habitat restoration, pulse flows, managed agricultural floodplains, and other actions.

Staff also participated in other collaborative Delta science forums to provide input to workplans and studies, including the Delta Independent Science Board and the Delta Science Program Science Actions Workshop for development of the 2022-2026 Science Action Agenda.

Board Report (Bay-Delta Management Report)

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

The following is a summary of Metropolitan's cumulative BDCP/CWF-CER/DCP expenditures updated for the quarter ending June 2021. This report includes the total internal costs related to the BDCP, the CWF-CER alternatives and the subsequent DCP efforts with the state administration.

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

Total (July 2005 – June 2021)

BDCP/CWF-CER/DCP Internal MWD	Total Costs (16.0 yrs.)
Labor & Benefits ⁽¹⁾	\$ 35.58M
Professional Services	\$ 7.07M
Travel	\$ 1.79M
Other ⁽²⁾	\$ 0.18M
SUBTOTAL	\$ 44.62M
Administrative Overhead	\$ 12.98M
TOTAL	\$ 57.60M

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

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

Quarterly Summary (July 2020 – June 2021)

	FY20-21 Q1	FY20-21 Q2	FY20-21 Q3	FY20-21 Q4
	Jul-Sep 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021
Labor	0.350M	0.437M	0.327M	0.353M
Professional Services	0.101M	0.031M	0.200M	0.009M
Travel	0.000M	0.000M	0.000M	0.001M
Other	0.000M	0.000M	0.000M	0.000M
SUB-TOTAL	0.451M	0.468M	0.527M	0.363M
Admin. Overhead	0.117M	0.148M	0.121M	0.131M
TOTAL	0.568M	0.616M	0.648M	0.494M

The following is a summary of the DCFA costs for member's share of administrative expenses:

Quarterly Summary (July 2020 – June 2021)

	FY20-21 Q1	FY20-21 Q2	FY20-21 Q3	FY20-21 Q4
	Jul-Sep 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021
TOTAL	0.003M	0.003M	0.003M	0.002M



Water Resource Management Manager's Report

Water Planning and Stewardship Committee
Item 7c
August 16, 2021

Fiscal Year 2020/21 Year End Conservation Expenditures

	Paid ⁽¹⁾	Committed ⁽²⁾
Regional Devices	\$4.6M	\$1.8M
Member Agency Administered	\$1.5M	\$7.1M
Turf Replacement	\$8.6M	\$7.9M
Advertising	\$0.1M	\$0.0M
Other	\$1.8M	\$1.8M
TOTAL	\$16.6M	\$18.6M

- Budgeted expenditures of \$24 M each year
- Authorized expenditures for FY20/21 & FY21/22 was \$42M each year

(1) As of 7/1/2020 - 6/30/2021

(2) Committed dollars as of July 10, 2021

Conservation Activity: Outdoor

Fiscal Year 2020/21



Turf Replacement Rebates:
4,290,921 ft² removed



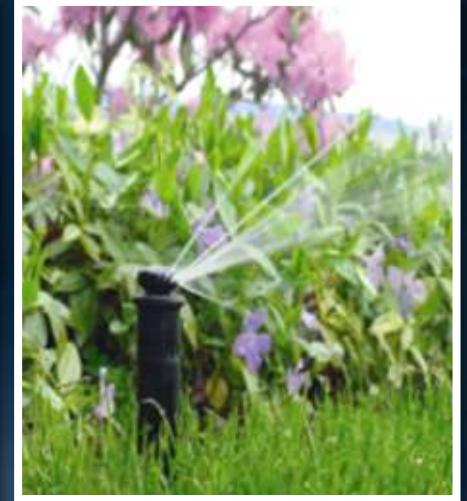
Smart Irrigation Controllers:
14,099 units rebated



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: Stormwater



- **August 10:** stormwater whitepaper
Hosted by SoCal Water Coalition

