The Metropolitan Water District of Southern California

Agenda

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

IW Committee
G. Peterson, Chair
D. Erdman, Vice Chair
L. Ackerman
R. Atwater
G. Cordero
L. Dick
S. Faessel
F. Jung
T. McCoy
J. Morris
B. Pressman
T. Quinn
M. Ramos
R. Record
T. Smith

Imported Water Committee - Final - Revised 1

Meeting with Board of Directors *

October 10, 2022

2:00 p.m.

Monday, October 10, 2022 Meeting Schedule

09:30 a.m. F&I
10:30 a.m. E&O
01:00 p.m. C&L
02:00 p.m. IW

Live streaming is available for all board and committee meetings on mwdh2o.com (Click Here)

A listen only phone line is also available at 1-877-853-5257; enter meeting ID: 831 5177 2466. Members of the public may present their comments to the Committee on matters within the committee's jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference (833) 548-0276 and enter meeting ID: 815 2066 4276.

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

* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

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

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

2. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the Meeting of the Imported Water Committee held September 12, 2022 **21-1574**

Attachments: 10102022 IW 2A Minutes

3. CONSENT CALENDAR ITEMS - ACTION

Zoom Online and Boardroom

7-8 Authorization to extend the term of the Operational Shift Cost Offset Program to provide credits in calendar year 2023; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-1560**

Attachments: 10112022 IW 7-8 B-L
10102022 IW 7-8 Presentation

7-9 Adopt the Revision and Restatement of Bay-Delta Policies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-1555**

Attachments: 10112022 IW 7-9 B-L
10102022 IW 7-9 Presentation

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

4. OTHER BOARD ITEMS - ACTION

NONE

5. BOARD INFORMATION ITEMS

9-3 Information on Potential Early Operation of the High Desert Water Bank Program [WITHDRAWN] **21-1559**

6. COMMITTEE ITEMS

a. Update on Delta Conveyance Public Draft Environmental Impact Report **21-1571**

Attachments: 10102022 IW 6a Presentation

b. Update on Water Surplus and Drought Management and Water Shortage Emergency Condition **21-1573**

Attachments: 10112022 IW 6b Report
10102022 IW 6b Presentation

c. Update on plan to add 500,000 acre-feet of water to Lake Mead (500 Plus Plan) **21-1591**

Attachments: 10102022 IW 6c Presentation

7. MANAGEMENT REPORTS

a. Colorado River Manager's Report **21-1575**

Attachments: 10102022 IW 7a Report

b. Bay-Delta Manager's Report **21-1576**

Attachments: 10102022 IW 7b Report

c. Water Resources Management Manager's Report **21-1577**

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

IMPORTED WATER COMMITTEE

September 12, 2022

Committee Chair Peterson called the teleconference meeting to order at 1:19 p.m.

Members present: Chair Peterson, Vice Chair Erdman, Directors Ackerman, Cordero, Dick (entered after roll call), Faessel, Jung, McCoy, Morris, Pressman, Quinn, Ramos, Record, and Smith.

Member absent: Director Atwater.

Other Board Members present: Directors Abdo, Blois, De Jesus, Dennstedt, Goldberg, Hawkins, Kurtz, Lefevre, Luna, and Tamaribuchi.

Committee Staff present: Arakawa, Hagekhalil, Horton, Upadhyay, Winn, and Zinke

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

1. Ms. Caty Wagner, Sierra Club California, addressed the committee regarding agenda item 7-6.
2. Ms. Charming Evelyn, Chair of the Water Committee, Sierra Club California, Angeles Chapter, addressed the committee regarding agenda item 7-6.
3. Ms. Alice Neuhauser (sic), Manahattan Beach, California, addressed the committee regarding regarding agenda item 7-6.
4. Ms. Kasil Willie, Staff Attorney, Save California Salmon, addressed the committee regarding agenda item 7-6.
5. Ms. Maura Monagan, Los Angeles Water Keeper, addressed the committee regarding agenda item 7-6.

Chair Peterson announced there would be a reordering of the meeting agenda. Items 7a, 7b, and 7c would be heard first.

7. MANAGEMENT REPORTS

a. Subject: Colorado River Manager's Report

Presented by: Shanti Rosset, Colorado River Resources Policy Manager

Ms. Rosset reported on the water elevations of Lake Powell and Lake Mead, the U.S. Bureau of Reclamation's (Reclamation) third and fourth consultations, and provided information on the joint response letter the Seven Basin States provided to Reclamation's published request for input on the post-2026 operations.

b. Subject: Bay-Delta Manager's Report

Presented by: Steve Arakawa, Bay-Delta Initiatives Manager

Mr. Arakawa commented that the California Department of Water Resources public comment hearings for the Delta Conveyance Project Draft Environmental Impact Report are being held virtually, and gave the dates of the hearings. He also highlighted Metropolitan's science efforts regarding salmon recovery and reported on the State Water Project's and Central Valley Project's Delta operations, and the impending removal of the drought salinity barrier.

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c. Subject: Water Resource Management Manager's Report

Presented by: Kevin Donhoff, Water Resource Management Group, Resource Implementation Section Manager

Mr. Donhoff presented information regarding: the State Water Project (SWP) water order, the Colorado River diversion request, expectations regarding the anticipated low December 1 SWP water supply allocation, and the SWP energy emergency response efforts to assist with electrical grid issues during the recent heat wave.

Chair Peterson announced that the meeting would now return to its originally scheduled order as listed on the agenda.

CONSENT CALENDAR ITEMS – ACTION

2. CONSENT CALENDAR OTHER ITEMS -- ACTION

None

3. CONSENT CALENDAR ITEMS – ACTION

7-6. Subject: Adopt the Revision and Restatement of Bay-Delta Policies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Substitute Motion: Defer action for one month

Presented by: Nina Hawk, Bay-Delta Initiatives Policy Manager

Bay-Delta Initiatives Manager Steve Arakawa introduced Ms. Hawk. She provided a recap and overview of the timeline and staff work to date on the revised Bay-Delta Polices. She also described the proposed policy objectives, the reason for the update, and a schedule for bringing it back to the board for possible action.

Executive Officer and Assistant General Manager, Water Resources Deven Upadhyay commented on recent input that and suggested that staff return next month with the action item.

The following Directors provided comment or asked a question.

1. Morris
2. Faessel
3. Ackerman
4. Smith
5. Goldberg
6. Quinn
7. Blois
8. Peterson

Staff responded to the Director's question and comments.

Director Quinn made a substitute motion, seconded by Director Cordero to defer action for one month on the consent calendar consisting of item 7-6:

The vote on the Substitute motion was:

Ayes: Directors Ackerman, Cordero, Dick, Erdman, Faessel, Jung, McCoy, Peterson, Pressman, Quinn, Ramos, Record, and Smith.

Noes: None

Abstentions:

Absent: Directors Atwater and Morris.

The motion passed by a vote of 13 ayes, 0 noes, 0 abstention, 2 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

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

Presented by: Noosha Razivian, Water Resource Management Associte Resource Specialist

Ms. Razivian reported on the supply and demand balance by noting recent weather conditions, provided updates on Metropolitan's Upper Feeder pipeline shut down, and status of the Emergency Water Conservation Program within the SWP dependant area.

The following Directors provided comment or asked a question.

1. Smith
2. Goldberg
3. Ramos

Staff responded to the Director's question and comments.

b. Subject: Update on Colorado River Basin System Conditions and Colorado River Basin State Discussions

Presented by: Shanti Rosset, Colorado River Resources Policy Manager

Ms. Rosset provided updates on Lake Powell and Lake Mead operations, by discussing the Reclamation's 24-month study, including forecast assumptions. She also reported the federal Inflation Reduction Act provides funds for drought mitigation.

The following Directors provided comments or asked a question.

1. Lefevre
2. Smith
3. Record
4. Erdman
5. Ackerman

Staff responded to the Director's question.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

None

Meeting adjourned at 3:12p.m.

Glen Peterson
Chair

- **Board of Directors**
  Imported Water Committee

10/11/2022 Board Meeting

7-8

Subject

Authorization to extend the term of the Operational Shift Cost Offset Program to provide credits in calendar year 2023; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Operational Shift Cost Offset Program (OSCOP) helps preserve limited State Water Project (SWP) supplies by offsetting the increased costs a member agency incurs by shifting Metropolitan deliveries from SWP-supplied connections to Colorado River water-supplied connections at Metropolitan's request. Under existing OSCOP agreements, Metropolitan's member agencies have shifted about 52,000 acre-feet (AF), helping Metropolitan preserve its limited SWP supplies. This proposed action would extend the term of OSCOP into calendar year (CY) 2023 because of continuing drought conditions.

Agreements are slated to terminate on December 31, 2022, per the terms approved by the Board for the current OSCOP. Staff have reassessed the program and recommend extending the OSCOP to 2023. This action would further preserve SWP supplies and avoid additional resource and operational costs that would be necessary for Metropolitan to meet demands in SWP-dependent areas without demand deferment. Metropolitan would reassess the program based on operational experience, observed costs, and other lessons learned and return to the Board for approval of any extension of the program after 2023, if deemed necessary.

Details

Background

Following three years of record-breaking drought conditions that resulted in historically low SWP deliveries, Metropolitan declared a Water Shortage Emergency in the SWP-dependent areas and authorized an Emergency Water Conservation Program in April 2022. Despite extraordinary measures taken by Metropolitan, its member agencies, and others in Southern California, further and immediate action is needed to preserve and slow the draw from Metropolitan's stored SWP supplies. In order to maximize available Colorado River supplies and to save the limited SWP storage for potential future drought years, Metropolitan is maximizing use of its integrated and flexible system by working with the member agencies through the existing OSCOP to shift the points of delivery to meet demands wherever possible to preserve SWP supplies.

In May 2021, the Metropolitan Board authorized the OSCOP and authorized the General Manager to enter into agreements to provide a cost-offset credit of up to $332 per AF in CY 2021 and $349 per AF in CY 2022 for net increased costs incurred by a member agency from shifting operations to improve regional reliability. This credit was set at $5 per AF above Metropolitan's Treatment Surcharge in each of the years. The Treatment Surcharge formed the basis of the maximum cost offset payable credit since most operational changes consisted of shifts from untreated deliveries to treated deliveries. The $5 per AF increase beyond the Treatment Surcharge helped offset additional monitoring or operational costs incurred by the member agency due to the shift.

The program was authorized for CYs 2021 and 2022. Metropolitan executed OSCOP agreements with Eastern Municipal Water District, the city of Los Angeles, the city of Santa Monica, and Three Valleys Municipal Water District. Metropolitan is currently drafting agreements with Upper San Gabriel Valley Municipal Water District and Central Basin Municipal Water District. As of August 2022, Metropolitan and participating member agencies have certified a shift of approximately 52,000 AF (which, comparatively, is nearly half of the volume of the

current 5 percent SWP allocation). Based on continuing drought circumstances, staff proposes to extend the term of the OSCOP.

Proposed Extension of Term

This action seeks to extend the term of the OSCOP through CY 2023 to continue providing cost-offset credits for member agency actions related to operational changes to their system that provide a regional benefit. Cost-offset credits would only be given to a member agency under the following conditions:

- The member agency takes an action to make changes to its operations to accommodate Metropolitan's operational request.
- The member agency incurs costs due to these actions that are above the normal costs to operate their system.

These limits ensure that Metropolitan only pays cost-offset credits for deliveries needed for Metropolitan to implement its own operational changes. It also ensures that credits are paid only for expenses incurred that exceed the member agencies' normal operation costs due to receiving shifted Metropolitan water deliveries. Upon approval, the General Manager would work with participating member agencies and enter into agreements through CY 2023 to address the need to continue shifting deliveries sourced from SWP supplies or storage to deliveries from the Colorado River.

Operational Shift Cost Offset Program

Attachment 1 provides the general terms for the OSCOP. OSCOP would be offered in CY 2023, and credits for water delivered under qualifying operational changes would be limited to up to $359/AF. The credit limit of $359 per AF is set at $5 per AF above Metropolitan's 2023 Treatment Surcharge, similar to the program in CYs 2021 and 2022. Although it is expected that most operational changes will consist of shifts from untreated deliveries to treated deliveries, some participating agencies have made other types of coordinated operational shifts to reduce deliveries of SWP supplies. Such coordinated shifts have resulted in additional costs due to additional energy use, increased operations and maintenance costs, and increased purchase costs. Staff is proposing to only add one additional year (CY 2023) at this time.

Staff reviewed the performance of OSCOP in CYs 2021 and 2022 and determined that no program changes are needed (other than updating the maximum credit based on the 2023 Treatment Surcharge). Certification and reconciliation procedures are already in place to determine the maximum credit that can be reimbursed (if any). All water delivered under the OSCOP will be billed at Metropolitan's applicable full-service rate. If cost-offset credits are issued, Metropolitan will account for the costs similar to other supply programs. The costs are accounted for in the quarterly financial report as supply program costs. Although the OSCOP was not included as part of the Supply Programs Budget for FY 2022/23 and FY 2023/24, even with that addition of this program, the total Supply Programs Budget is projected to be below budget as a result of reductions in other programs.

Initiating Cost-Offset Credits and Reporting

Metropolitan regularly reports to the Board on developing supply and demand conditions through Water Surplus and Drought Management (WSDM) reporting. These monthly reports inform the Board of developing conditions, including the potential use of storage assets and the likelihood of storing or withdrawing supplies. Notification of OSCOP implementation is reported through the WSDM reports.

To calculate the credit, staff looks at the net additional costs an agency incurs in taking the above actions beyond their normal cost for making operational changes to their system to accommodate Metropolitan's operational changes. The increased costs would be eligible for the credit, up to $5/AF above the Treatment Surcharge.

Summary

The OSCOP has helped Metropolitan maximize the current resources available from the Colorado River and SWP. By offsetting costs for agencies to shift deliveries, Metropolitan has increased reliability for the region. This program has further helped reduce the need for purchasing more expensive transfer supplies. If extended to CY 2023, OSCOP will continue to allow for improved availability of storage reserves to supplement supplies during dry years. With this extension of the OSCOP term, Metropolitan would have additional operational

flexibility to decrease deliveries from the SWP side of its system and increase deliveries from the Colorado River part of its system in the current year to increase storage supplies on the SWP for the future.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 4209: Contracts

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action involves continuing administrative activities such as general policy and procedure making, which will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. (Section 15378(b)(4) of the State of CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize to extend the term of the Operational Shift Cost Offset Program to provide credits in CY 2023, consistent with the terms in **Attachment 1**.

Fiscal Impact: Up to $359 per AF credit to the member agency in CY 2023. CY 2023 funding is unbudgeted. Although the OSCOP was not included as part of the Supply Programs Budget for FY 2022/23 and FY 2023/24, even with that addition of this program, the total Supply Programs Budget is projected to be below budget as a result of reductions in other programs.

Business Analysis: Metropolitan would improve regional reliability by shifting operations to deliver more Colorado River water and reserving its limited supplies on the SWP. The additional cost to manage such water at an amount not to exceed $359 per AF in CY 2023 is reasonable in light of Metropolitan's past average cost of $300 per AF to recover water in its SWP storage programs, north-of-Delta transfers (with costs in the range of $800/AF), and the anticipated unavailability of that water in the near future.

Option #2

Do not authorize extending the term of the Operational Shift Cost Offset Program to provide credits in CY 2023.

Fiscal Impact: None

Business Analysis: Not implementing the credit decreases Metropolitan's flexibility in managing supplies for the region and reduces overall regional reliability.

Staff Recommendation

Option #1

10/5/2022

Brad Coffey *Date*
Manager, Water Resource Management

10/6/2022

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Term Sheet Operational Shift Cost Offset Program (OSCOP)

Ref# wrm12689530

Term Sheet

Operational Shift Cost Offset Program (OSCOP)

Cost-Offset Credit

- Credit of up to $359 per acre-foot (AF) in calendar year (CY) 2023 to help offset the estimated additional costs and risks incurred by the agency as a result of voluntary operational changes requested by Metropolitan for the purpose of maximizing Metropolitan's water resources.
- Metropolitan would have sole discretion in determining the eligible costs that would be credited.
- Credit would be based on Metropolitan's requested operation compared to the agency's normal operation. For example, if a member agency shifted deliveries from untreated to treated service connections per Metropolitan's request, the agency's increased cost would be the difference between Metropolitan's Treatment Surcharge and the agency's own cost to treat water. The agency may also incur other costs to implement the change in operation, which could include power or disinfection costs within their distribution system. In this case, Metropolitan would reimburse the agency for these cost increases on a per acre-foot basis, up to the maximum amount described above.
- All components of Metropolitan's full-service water rate, including the Readiness-to-Serve Charge, would be charged at the time the water is delivered. The Capacity Charge will apply, as OSCOP is not intended to change the amount of overall deliveries or the timing of the deliveries, rather just shift location of deliveries. Any operational changes that do affect the Capacity Charge determination, based solely on Metropolitan's request, will be evaluated for the applicability of the Capacity Charge.
- Member agency will be invoiced for water delivered.
- Transactions would be accounted for at the meter level.
- The credit would be applied to the member agency meter invoiced amount and would be subject to reconciliation of the credit amount and the delivery amount. Adjustments to credits could result from reconciliations.

Term

- Metropolitan would enter OSCOP agreements with the member agencies interested in participating in the Program.
    - 1-year program agreement.
    - The credit would apply only to deliveries made pursuant to the Program.

Imported Water Committee

Authorization to Extend the Term of the Operational Shift Cost Offset Program to Provide Credits in Calendar Year 2023

Item 7-8

October 10, 2022

Operational Shift Cost-Offset Program

Background

- Approved by the Metropolitan Board of Directors on May 11, 2021
- Issues cost-offset credits for member agency actions related to operational changes to their system
  - Provides a regional benefit
- Agreement between Metropolitan & Member Agency
- Program offered in Calendar Years 2021 & 2022

Operational Shift Cost-Offset Program

Program Implementation

- Agreements executed with:
  - City of Los Angeles
  - Three Valleys Municipal Water District
  - Eastern Municipal Water District
  - City of Santa Monica
- Demand shift from SWP to Colorado River supplies improved regional reliability by preserving SWP supplies
  - Approx. 52,000 AF shifted & $10.5 M credited through Sept. 2022

Operational Shift Cost-Offset Program

Current Conditions

- Similar to May 2021
  - Anticipating a low initial SWP allocation
  - Taking dry-year WSDM actions to satisfy the supply/demand gap
    - Storage withdrawals
    - Purchase transfer supplies
    - Operational actions to minimize use of limited SWP supply
- A need remains to shift operations to reduce use of limited SWP supply in 2023

Operational Shift Cost-Offset Program

Financial Terms – Credit Determination

- Credit keyed to treatment surcharge and up to $5/AF for additional costs to manage shift
  - Performance based
  - Offset additional member agency costs and impacts (e.g., treatment, pumping)
- If extend to 2023, the maximum credit would increase to $359/AF

Operational Shift Cost-Offset Program

Financial Terms – Billing Process

- Member agency billed at full-service water rate
- Voluntary deliveries at Metropolitan's discretion
  - Capacity charge not affected
- Monthly certifications
- Annual reconciliations
- Credit applied on a Metropolitan invoice

Operational Shift Cost-Offset Program

Summary of Benefits

- Shifts Metropolitan's operations to enhance reliability
- Increases Metropolitan's flexibility in responding to prolonged dry years
- Eliminates the financial barrier a member agency faces in re-operating their distribution system for a regional benefit

Operational Shift Cost-Offset Program

Board Options

- Option #1

  Authorize to extend the term of the Operational Shift Cost-Offset Program to provide credits in CY 2023; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

- Option #2

  Do not authorize to extend the term of the Operational Shift Cost-Offset Program to provide credits in CY 2023

Operational Shift Cost-Offset Program

Staff Recommendation

- Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

- **Board of Directors**
  Imported Water Committee

10/11/2022 Board Meeting

7-9

Subject

Adopt the Revision and Restatement of Bay-Delta Policies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

At the April 2021 Bay-Delta Committee meeting, staff was requested to provide a review of Metropolitan's Bay-Delta Policies. Metropolitan's overarching Bay-Delta Policies were last updated in the mid-2000s. Since that time, many significant factors have arisen related to statewide water resources management, including changed conditions in the Bay-Delta region and throughout Metropolitan's service area. Staff went through an extensive internal process to review and consolidate the existing Bay-Delta Policies and develop a draft Bay-Delta Policy Framework (Framework) to facilitate discussion and input from the Board. Staff received board input on the draft Framework through discussions at Water Planning and Stewardship Committee meetings in May, June, and July 2022. Based on this feedback, staff developed a Framework consisting of three policy objectives and nine policy principles that restate existing policy and include key updates based on emerging trends. These policies were presented and discussed at the August 2022 Water Planning and Stewardship Committee meeting and presented for action at the September 2022 Imported Water Committee where the Committee acted to defer the item, per staff's suggestion, so that additional feedback could be addressed. The updated Bay-Delta Policies reflect additional feedback and are now presented for adoption.

Details

Since the adoption of Metropolitan's existing Bay-Delta Policies in the mid-1990s and early- to mid-2000s, many significant factors have arisen related to statewide water resources management, including changed conditions in the Bay-Delta region and throughout Metropolitan's service area. In addition, the current policy structure, while comprehensive, is embodied in several board actions and can be challenging to reference and difficult for the Board, outside decision-makers, and the public to understand. The Board's future oversight and actions could be more effectively supported by the consolidation and updating of the Bay-Delta Policies to align with emerging trends, while clarifying and preserving topics that continue to be relevant to the Board's ongoing direction.

Background

Overview of Existing Bay-Delta Policies

Since the mid-1990s, Metropolitan's Board has taken a number of actions and adopted policy principles that support staff implementation of activities related to the Bay-Delta. These activities include day-to-day tasks, projects, policy and program development, program management, engagement with external parties, long-term planning, and key investments. Collectively, staff refers to this set of board policy actions as the "Bay-Delta Policies."

Pre 2006 – Bay-Delta Board actions and related policies: Key Metropolitan board-approved policies were adopted following the passage of the Central Valley Project Improvement Act of 1992, which aimed to solve water conflicts by establishing a balance between requirements for fish and wildlife, agriculture, municipal, industrial, and power interests.

***April 2006 – Board adoption of policy principles regarding long-term actions for the Sacramento-San Joaquin River Delta**.:* In recognition of then-recent events, including Hurricane Katrina, the Jones Tract levee failure, declining fish species in the Delta, and renewed state efforts to protect the Delta, the Board adopted 13 policy principles that reflected the importance of the Delta to Metropolitan. These policy principles included a Delta Mission Statement. Based on the four central themes, 13 specific policy principles were adopted to ensure long-term challenges in the Delta could be successfully met.

***June 2007 – Board support, in principle, of the proposed framework for Metropolitan's Delta Action Plan**:* Following board adoption of the 13 policy principles for the Delta, the development of Metropolitan's Delta Action Plan began. At its April 2007 Board of Directors Retreat, the Board discussed a proposed framework for directing Metropolitan's staff action on Delta-related issues.

September 2007 – Board adoption of criteria for conveyance options in implementation of the Long-Term Delta Action Plan: In September 2007, Metropolitan's Board adopted six key policy criteria for considering the water supply conveyance options being developed by the State of California: (1) provide water supply reliability; (2) improve export water quality; (3) allow flexible pumping operations in a dynamic fishery environment; (4) enhance the Delta ecosystem; (5) reduce seismic risks; and (6) reduce climate change risks.

August 2008 and January 2009 – Board approval of Delta Governance Principles and support of the Final Delta Vision Implementation Report: In August 2008, the Board adopted Delta Governance Principles in response to the governance strategy established by the Governor's Blue-Ribbon Task Force. The Governor's Blue-Ribbon Task Force adopted a Delta Vision Plan to describe an overarching vision for the future of the Delta, followed by a subsequent Delta Vision Strategic Plan.

Current Update Process

Overview of Process to Consolidate, Review, and Update the Bay-Delta Policies

At the April 2021 Bay-Delta Committee meeting, staff was directed to review and propose updates to Metropolitan's Bay-Delta Policies. In November 2021, staff followed up with a presentation to the Bay-Delta Committee that provided a high-level overview of the history of Metropolitan's Bay-Delta Policies and a proposed process to review and consider updates to those policies.

Internal Review and Development Process

During the fall of 2021 and into early 2022, staff went through a process to review and consolidate the existing Bay-Delta actions and policies described above. Staff subject matter experts throughout Metropolitan provided input on key policy areas to identify changed conditions and emerging trends. Staff solicited additional input on draft policy objectives and principles from the Office of the General Manager, External Affairs, Water Resource Management, Real Property, Finance, and Legal leading up to the July 2022 information item.

Board Review of Policy Principles

April 2022 – Water Planning and Stewardship Committee: Staff developed and transmitted background information to the Committee prior to the April 2022 meeting to serve as background and a reference and to promote continued discussion.

May 2022 – Water Planning and Stewardship Committee: Staff provided background on existing board-adopted Bay-Delta Policies and described the key policy areas that were identified in the internal review process. In addition, staff outlined how those key policy areas were used to develop a draft Framework and policy principles and provided examples of how the Framework could be used to support different policy applications.

June 2022 – Water Planning and Stewardship Committee: The Board provided staff with additional feedback on the draft policy framework and policy principles. Staff also received feedback from member agencies through discussions with staff, member agency meetings, and requests for staff to provide updates at member agency board meetings.

August 2022 – Water Planning and Stewardship Committee: In response to board and member agency feedback, staff further refined and consolidated the draft policy framework and policy principles and brought forward a Revised Bay-Delta Policy Objectives and Framework to the Committee as an Information Item.

September 2022 – Imported Water Committee: An action letter was presented to the Imported Water Committee, with a staff-recommended action to "Adopt the revision and restatement of Bay-Delta Policy Objectives and Framework" commensurate with the August 2022 Information Item. During Committee, staff suggested deferment of the item for one month to further refine in response to feedback received from the Board, member agencies, and the public. The Committee acted to defer the item. Staff has refined the Revised Bay-Delta Policy Objectives and Framework **(Attachment 1)** as discussed below. Staff has also attached a Redline Revised Bay-Delta Policy Objectives and Framework **(Attachment 2)** for ease of reference, and a summary of the revisions in the following table:

Feedback Themes	Response
Greater emphasis and/or clarity regarding coequal goals from Delta Reform Act	Language modified and added to Policy Objective 2, respective descriptor, footnote added to attachment 1
Greater emphasis on climate change science and greenhouse gases	Language added to Policy Objective 3 descriptor
Greater emphasis on reduced reliance from Delta Reform Act	Language modified and added to Policy Principle 2A and respective descriptor, footnote added to attachment 1
Greater emphasis on engagement (environmental justice and underserved communities)	Language modified and added to Policy Principle 3B descriptor
"SWP Dependent Areas" references unnecessary	Removed references to "SWP Dependent Areas" in attachment 1

Revised Bay-Delta Policy Framework

Based on board feedback, staff developed a Framework consisting of three policy objectives and nine policy principles, shown in the table below, that restate existing policy and include key updates based on emerging trends. The Revised Bay-Delta Policy Objectives and Framework document provides an overview of how to navigate the policy Framework, key descriptors of each element of the Framework, and examples that illustrate how the policy principles might be applied.

***Revised* Bay-Delta Policy Objectives**
1: Promote a Sustainable Bay-Delta within Metropolitan's One Water Approach
2: Support Statewide and Regional Actions that Further the Coequal Goals Established in the Delta Reform Act
3: Address the Risks Associated with Climate Change
***Revised* Bay-Delta Policy Framework**
Policy Area 1: Science and Watershed Management
1A: Protect and restore aquatic species and habitats based on best available science
1B: Partner in watershed-wide approaches to develop comprehensive solutions
1C: Advance responsible stewardship of Metropolitan's Delta Islands
Policy Area 2: Water Supply Reliability and Resilience
2A: Protect water supply reliability and quality while reducing reliance consistent with the Delta Reform Act
2B: Invest in actions that provide seismic and climate resiliency
2C: Seek flexible operations, water management actions, and infrastructure solutions
Policy Area 3: Partnerships and Cost-Effective Investments
3A: Maintain and pursue cost-effective financial investments
3B: Foster broad and inclusive engagement of Delta interests and beneficiaries
3C: Promote innovative and multi-benefit initiatives

Application of the Revised Bay-Delta Policy Framework

The Framework described above provides direction to staff related to day-to-day Bay-Delta work activities, project management, external engagement, and longer-term planning efforts. In addition, the Framework would support future board deliberation when it considers individual actions. The following examples help illustrate how the Framework would be applied.

Reduced Delta Reliance

Local and regional projects such as Pure Water Southern California that improve regional self-reliance are supportive of all three Bay-Delta Policy Objectives: (1) Promote a sustainable Bay-Delta within Metropolitan's One Water approach, which, among other things, aims to reduce Metropolitan's dependence on imported water and expand local and drought resistant supplies; (2) Support statewide and regional actions that further the coequal goals established in the Delta Reform Act; and (3) Address the risks of climate change by diversifying sources of supply. In alignment with state policy, local and regional projects that increase regional self-reliance, and also provide for reduced reliance on the Delta.

Delta Conveyance

The proposed Delta Conveyance Project (DCP) as described in the draft environmental impact report endeavors to be consistent with all three Bay-Delta Policy Objectives. Under the proposed Framework, staff would review the proposed project through the lens of several applicable Policy Principles, including: (2A) Protect water supply reliability while reducing reliance consistent with the Delta Reform Act; (2B) Invest in actions that provide seismic and climate resiliency; (2C) Seek flexible operations, water management actions, and infrastructure solutions; (3A) Maintain and pursue cost-effective financial investments; and (3B) Foster broad and inclusive engagement of Delta interests and beneficiaries. As described above, these Policy Objectives and Principles guide staff activities related to the DCP and would also provide guidance for any future board actions/recommendations. As an example of how the Framework functions, if the California Department of Water Resources were to propose design modifications that render the DCP inconsistent with any applicable policies, staff would ensure that the issue is either resolved or made known in any future recommendations to the Board.

Recommendation

After accounting for significant board and member agency feedback, staff recommends the Board adopt these revised and restated Bay-Delta Policies. The Bay-Delta Policies account for recent emerging trends and feedback from the Board in recent months regarding adjustments from the previous policies. These Bay-Delta Policies, once adopted, will guide staff engagement on Bay-Delta and other related issues. If the Board chooses to not adopt these revised and restated Bay-Delta Policies, then staff will continue to take guidance from the current Bay-Delta Policies that have been in place for years.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 41504, dated July 13, 1995, the Board adopted principles guiding development of an urban position on amendment of the Central Valley Project Improvement Act (P.L. 102-575).

By Minute Item 45753, dated May 11, 2004, and Minute Item 46637, dated April 11, 2006, the Board adopted a set of Delta policy principles to ensure a solid foundation for development of future Metropolitan positions and to provide guidance to Metropolitan staff.

By Minute Item 47135, dated May 25, 2007, the Board supported, in principle, the proposed Delta Action Plan, as set forth in the letter signed by the General Manager.

By Minute Item 47232, dated September 11, 2007, the Board adopted criteria for support of conveyance options in implementation of a long-term Delta improvement plan.

By Minute Item 47605, dated August 19, 2008, the Board approved the Ad Hoc Subcommittee recommendations as outlined in the board letter.

By Minute Item 47769, dated January 13, 2009, the Board expressed a support position regarding the Final Delta Vision Implementation Report.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action involves continuing administrative activities such as general policy and procedure making, which will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) of the state CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the state CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the revision and restatement of Bay-Delta Policies.

Fiscal Impact: None
Business Analysis: Staff will operate under revised and restated Bay-Delta Policies that consider a number of significant factors including changed conditions in the Bay-Delta region and throughout Metropolitan's service area. In addition, the Board's future oversight and actions would be more effectively supported by updating the Bay-Delta Policies to align with emerging trends, while clarifying and preserving topics that continue to be relevant to the Board's ongoing direction.

Option #2

Do not adopt the revision and restatement of Bay-Delta Policies.
Fiscal Impact: None
Business Analysis: This board item will serve as a reference document for those interested in seeing trends affecting Metropolitan's Bay-Delta Policies. Staff will continue to operate under the previous Bay-Delta Policies and actions that were adopted in the mid-1990s and early- to mid-2000s which do not have the same policy emphasis on the significantly changed conditions since that time in the Bay-Delta region and throughout Metropolitan's service area.

Staff Recommendation

Option #1

10/5/2022
Stephen N. Arakawa *Date*
Manager, Bay-Delta Initiatives

10/6/2022
Adel Hagekhalil *Date*
General Manager

Attachment 1 – Revised Bay-Delta Policy Objectives and Framework

Attachment 2 – Redline Revised Bay-Delta Policy Objectives and Framework

Ref# eo12684791

Attachment 1: *Revised* Bay-Delta Policy Objectives and Framework

Overview

The *Revised* Bay-Delta Policy Objectives and Framework is a consolidation and restatement of existing Bay-Delta Policies; however, it also takes into consideration recent trends relevant to Metropolitan's interests. This document describes each of the three revised Bay-Delta Policy Objectives and Bay-Delta Framework (nine policy principles) with relevant examples listed under each of the nine policy principles.

The Bay-Delta Policy Objectives define Metropolitan's overarching goals to protect reliable, high quality water supplies in an environmentally sensitive manner, consistent with Metropolitan's Mission Statement. The Bay-Delta Framework includes nine policy principles intended to advance the Bay-Delta policy objectives. Once adopted, the Bay-Delta Policy Objectives and Framework collectively will guide Metropolitan staff and will inform future Board actions.

Revised Bay-Delta Policy Objectives		
• **Promote a Sustainable Bay-Delta Within Metropolitan's One Water Approach** • **Support Statewide and Regional Actions that Further the Coequal Goals Established in the Delta Reform Act** • **Address the Risks Associated with Climate Change**		
Revised Bay-Delta Policy Framework		
Science and Watershed Management	**Water Supply Reliability and Resilience**	**Partnerships and Cost-Effective Investments**
Protect and restore aquatic species and habitats based on best available science	Protect water supply reliability and quality while reducing reliance consistent with the Delta Reform Act	Maintain and pursue cost-effective financial investments
Partner in watershed-wide approaches to develop comprehensive solutions	Invest in actions that provide seismic and climate resiliency	Foster broad and inclusive engagement of Delta interests and beneficiaries
Advance responsible stewardship of Metropolitan's Delta islands	Seek flexible operations, water management actions, and infrastructure solutions	Promote innovative and multi-benefit initiatives

Bay-Delta Policy Objectives

Objective 1: Promote a Sustainable Bay-Delta Within Metropolitan's One Water Approach

Supplies from the Bay-Delta watershed are integral to implementing Metropolitan's One Water Approach, an integrated planning and implementation approach to managing finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs. Bay-Delta supplies are foundational to the One Water approach as they meet demands in Metropolitan's service area and acts as source water for local supply projects such as water recycling and groundwater basin replenishment.

Objective 2: Support Statewide and Regional Actions that Further the Coequal Goals Established in the Delta Reform Act[1]

Metropolitan supports the coequal goals established in the Delta Reform Act of (1) providing a more reliable water supply for California and (2) protecting, restoring, and enhancing the Delta ecosystem. Ongoing statewide and regional investments in ecosystem restoration, flood control, water supplies. multi-benefit projects in the Bay-Delta, and upstream watersheds are essential to building and maintaining resilient water supplies from the Bay-Delta. Effective implementation of state policies related to reduced reliance, water use efficiency, the Sustainable Groundwater Management Act, and initiatives such as the governor's Water Resilience Portfolio will be essential. Likewise, additional funding and permitting efficiencies can help expedite regional and local supply development, and projects that supply ecologically beneficial flows in the Bay-Delta or Bay-Delta watershed.

Objective 3: Address the Risks Associated with Climate Change

Climate change is impacting California's water resources: sea levels are rising, snowpack is decreasing, and water temperatures are increasing. Droughts are expected to become more frequent and more severe, and storm intensities are expected to increase. These climate change trends are anticipated to continue, posing a prolonged threat to the Bay-Delta and Metropolitan's water supplies. An integrated federal, state, regional, and local approach to developing and managing water supply programs and projects is critical to managing for the future with climate change impacts that are occurring. As climate conditions and science continue to evolve, Metropolitan supports the use and development of additional analyses, tools, and actions, including actions to reduce emissions consistent with Metropolitan's Climate Action Plan.

[1] As described in Public Resources Code § 29702

Bay-Delta Policy Framework

Policy Area 1: Science and Watershed Management

1A Protect and restore aquatic species and habitats based on best available science

Sustainable and resilient water supplies rely, in part, on the health of the Delta ecosystem. As populations of native aquatic wildlife continue to trend downward, rigorous and peer reviewed science protects the environment and Metropolitan's water supply by supporting informed decision-making.

Examples include: Metropolitan staff authored papers on topics including Delta Smelt Habitat, Salmon Growth, and Delta Stressors, the Lower Yolo Tidal Marsh Restoration Project, and participation in the Collaborative Science and Adaptive Management Program and inter-agency consultations on coordinated long term operations of the State Water and Central Valley Projects.

1B Partner in watershed-wide approaches to develop comprehensive solutions

With much of the state's water supply originating in the mountains, the health and management of the upper watersheds are critically important to California's water quality and water supply.

Examples include: potential partnerships and opportunities in the upper watershed focused on the long-term potential for climate change adaptation (including adjustments for loss of snowpack), reduction in the impacts of variable precipitation patterns on runoff, and improvements in water quality and water temperature.

1C Advance responsible stewardship of Metropolitan's Delta islands

The Delta Islands provide a unique opportunity for research, innovation, and collaboration with other stakeholders to develop sustainable strategies for Delta land use and environmental stewardship. Staff is engaged in specific processes and opportunities for responsible long-term stewardship of Metropolitan's Delta islands properties. Further advancements on Metropolitan's Delta Islands would comport with both the Bay-Delta Policy Framework and the Board's adopted Climate Action Plan.

Examples include: levee enhancements that protect the freshwater pathways to the State Water Project south-Delta pumps, pilot projects and scientific investigations to evaluate strategies for carbon sequestration, floating organic marshes that can support sensitive fish species, sustainable agriculture that halts or reverses subsidence, experiments to improve measurement of water diversions and water use, compensatory mitigation, habitat restoration for native aquatic species, native fish species preservation, and reduction in stressors affecting state and federal listed fish species.

Policy Area 2: Water Supply Reliability and Resilience

2A Protect water supply reliability and quality while reducing reliance consistent with the Delta Reform Act[2]

Two of the core tenets of Metropolitan's mission statement are to provide reliable and high-quality water supplies to its service area. The Delta is a major pathway for the source of water for most of the state and the sustainability of Delta water supplies is a critical element of Southern California's water reliability. This reliability is protected through science-based regulatory frameworks, long term water supply planning, collaborative partnerships and pursuing water supply infrastructure solutions while reducing reliance on the Delta.

Delta water quality should be protected for public health and managing salinity. Measures that reduce the salinity of Delta supplies will help meet regional salinity objectives of urban and agricultural agencies throughout California. This includes benefits to Metropolitan's service area to enhance management of Southern California groundwater basins and to develop additional recycled water.

> *Examples include: Water supply and quality initiatives including new Delta conveyance, Voluntary Agreements to implement State Water Resources Control Board Water Quality regulations, Delta Regional Monitoring Program, CV-SALTS, and Delta Nutrient Research Plan*

2B Invest in actions that provide seismic and climate resiliency

Earthquakes in the Delta region, sea level rise and subsidence can result in levee failure and saltwater intrusion into the Delta from the San Francisco Bay and the ocean. Changing weather patterns will result in longer periods of drought and more intense storms and storm periods. Resiliency requires continued participation and investment in actions including flood emergency planning, levee improvements, water storage, and water supply management.

> *Examples include: the DWR/USACE Delta Flood Emergency Integration Plan, the Governor's Water Resilience Portfolio, and new storage and conveyance projects.*

2C Seek flexible operations, water management actions, and infrastructure solutions

Current operations of the State Water Project and Central Valley Project facilities are subject to prescriptive flow and other regulatory standards. Metropolitan staff is working with partners to advance technology and monitoring that could be used to develop more effective water project operations that are protective of aquatic wildlife, with the support of new technological capabilities and better real-time information systems.

> *Examples include: Improved atmospheric river and runoff forecasting, forecast-informed reservoir operations, improved fish monitoring, including steelhead, artificial intelligence, modeling of aquatic wildlife behavior, improved rapid genetic testing of salvaged salmonids, and the use of true adaptive management and structured decision-making processes.*

[2] As described in California Water Code § 85021

Policy Area 3: Partnerships and Cost-Effective Investments

3A Maintain and pursue cost-effective financial investments

Completion and maintenance of large multi-benefit water supply projects require partnership and multiple funding sources to be cost-effective. Advancing partnerships and seeking multiple funding sources can offset or reduce expenditures associated with climate change adaptation for water supply and other public benefits, which are instrumental to future Metropolitan water supply reliability.

Examples include: repair of California Aqueduct subsidence, new Delta conveyance, Sites Reservoir, Pure Water and other local and regional projects.

3B Foster broad and inclusive engagement of Delta interests and beneficiaries

The Bay-Delta is a lifeline to multiple entities with diverse interests including tribes, public water agencies, local, state and federal agencies, non-governmental organizations, underserved communities, environmental justice groups and agricultural interests. Metropolitan embraces a proactive approach to seeking and sustaining engagement with all communities to foster new perspectives on Bay-Delta related issues and identify additional opportunities for collaboration.

Examples include: Engaging in the development of a Community Benefits Program for the Delta Conveyance Project, participating in the multi-interest Collaborative Science and Adaptive Management Program, opportunities for projects on Metropolitan's Delta Islands, participating in State Water Project Contractors, serving on the Delta Protection Commission Advisory Committee, participating in the Plumas Watershed Forum, and Sites Reservoir Committee and subcommittee engagement.

3C Promote innovative and multi-benefit initiatives

The Delta region is at the intersection of many social, political, environmental and climate related factors. As a result, Delta issues are significantly complex, with a significant degree of uncertainty given the range of physical and biological factors that are involved. Metropolitan recognizes that new technologies and approaches are needed to address current and future challenges in the Bay-Delta.

Examples include: Collaborative and innovative solutions including the use of structured decision making, environmental DNA to detect aquatic species, the Reorienting to Salmon Recovery effort, the Bouldin Island Levee Setback Project, and the Delta Smelt and Native Species Preservation Project.

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Imported Water Committee

Revision and Restatement of Bay-Delta Policies

Item 7-9
October 10, 2022

Policy Principles Review

Agenda

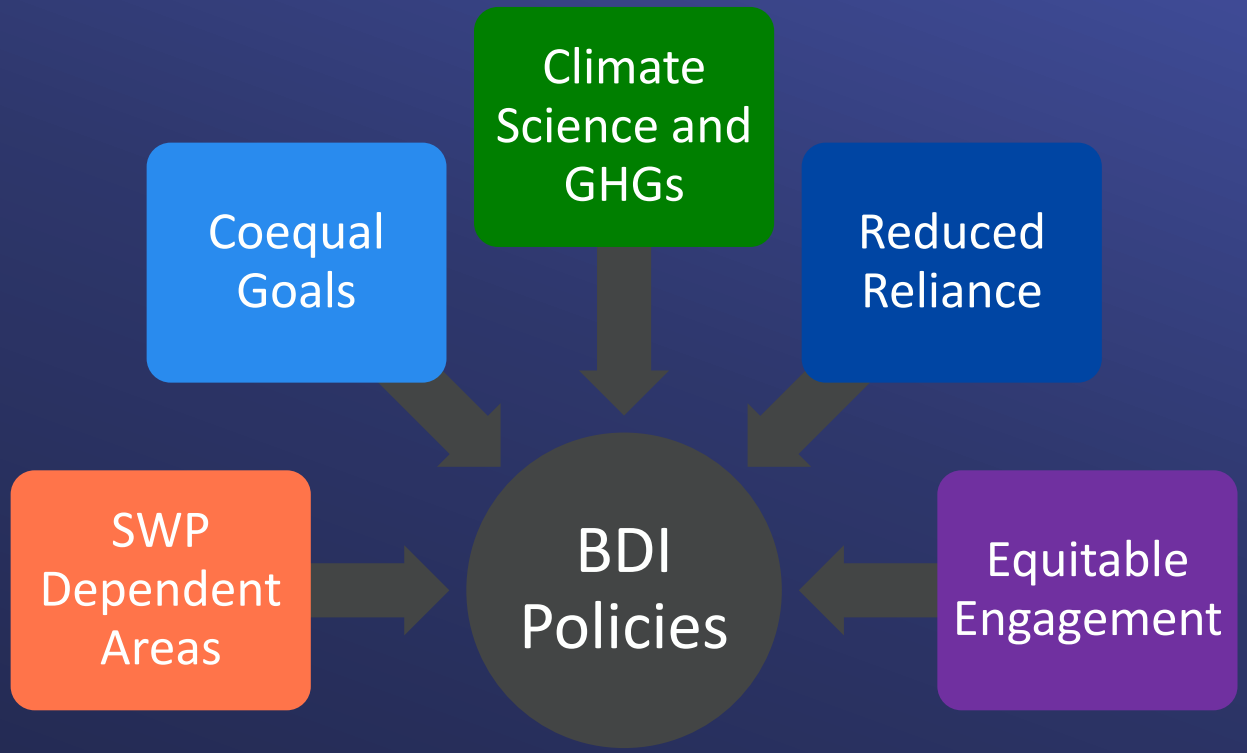
- Timeline Recap
- Feedback
- Revised Bay-Delta Policy Framework
- Board Action

BDI Policy Update Timeline
October Action

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Staff Research and Development													
Kick Off with BDI Committee		●											
Policy Review with WP&S Committee									●	●			
Board Info and Action Items							REPORT				INFO	DEFER	ACTION

Feedback

Latest Feedback Incorporated



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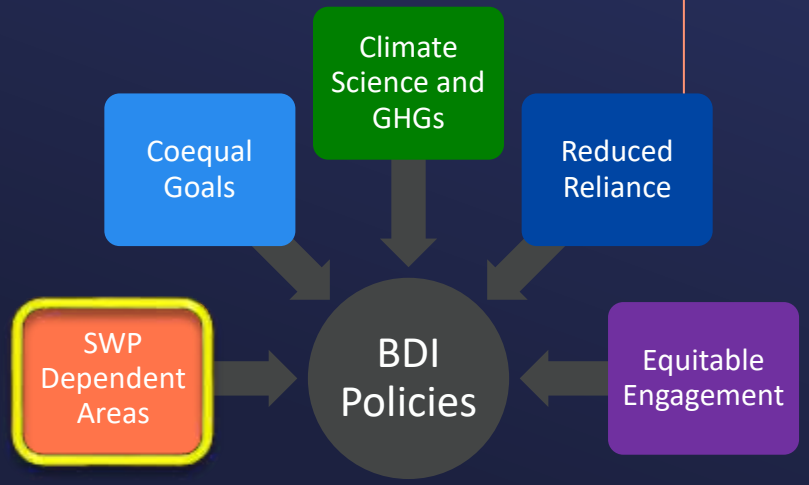
Feedback Area	Change to Policy Framework and Attachment 1
SWP Dependent Areas	Reference to SWP Dependent Areas removed in Policy Objective 1 descriptor



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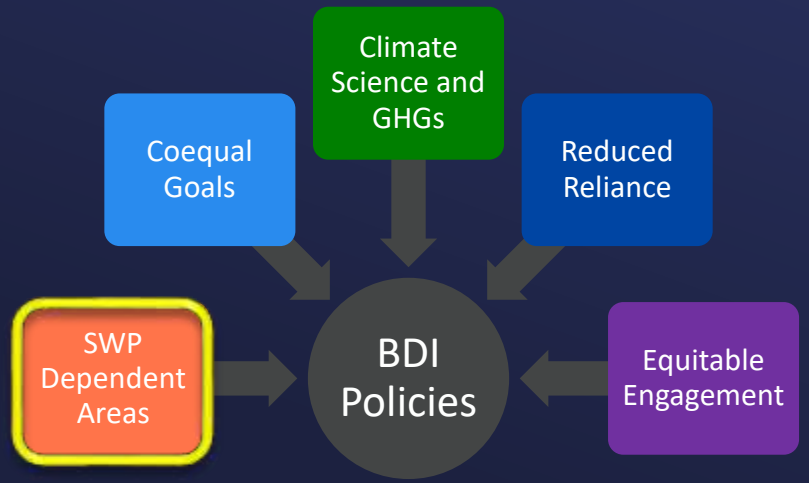

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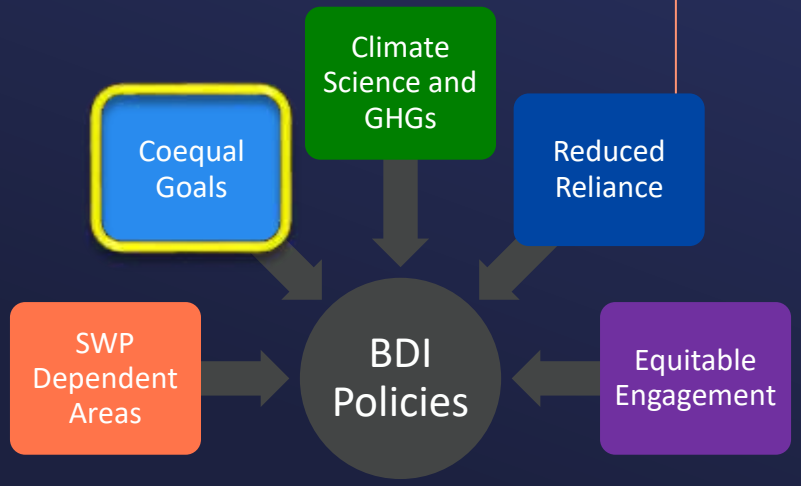

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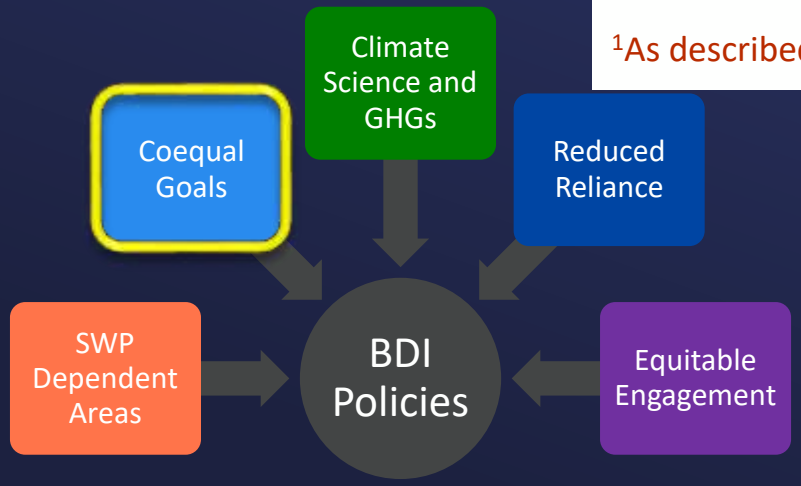

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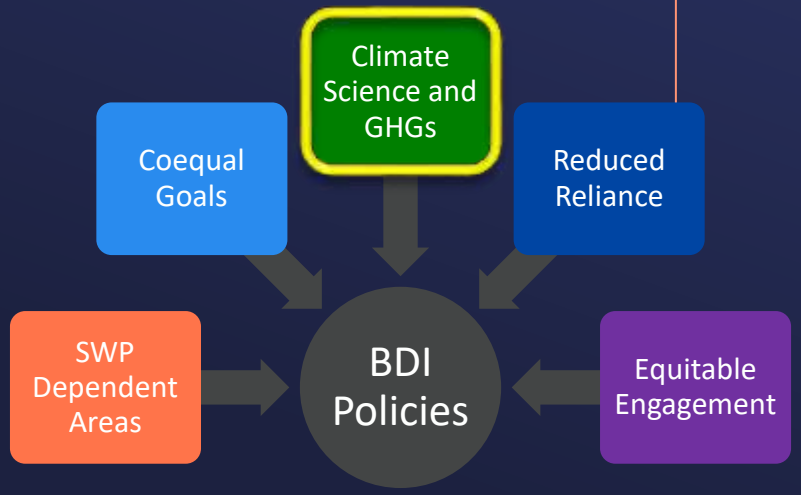

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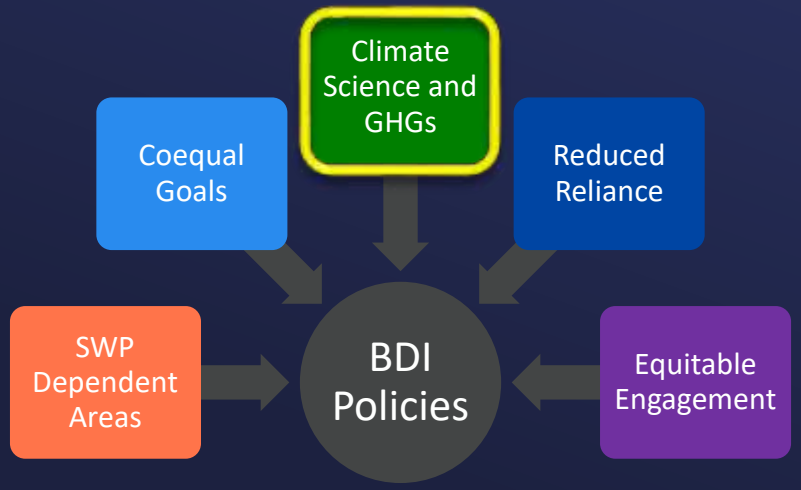

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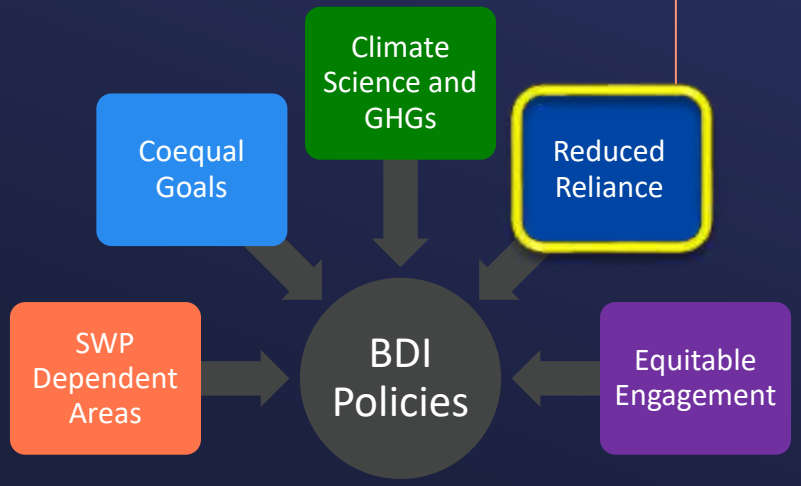

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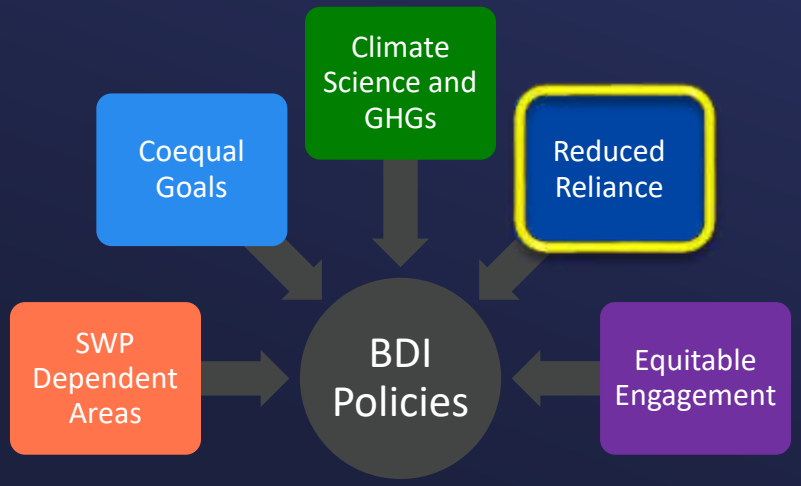
Coequal Goals	Added Coequal Goals language to Policy Objective 2 and a sentence to define Coequal Goals in Attachment 1, per the Delta Reform Act
Climate Science and GHGs	Additional sentence added to Policy Objective 3 descriptor regarding climate science and emission reductions.
Reduced Reliance	Additional language added to Policy Principle 2A and to Attachment 1 descriptor.

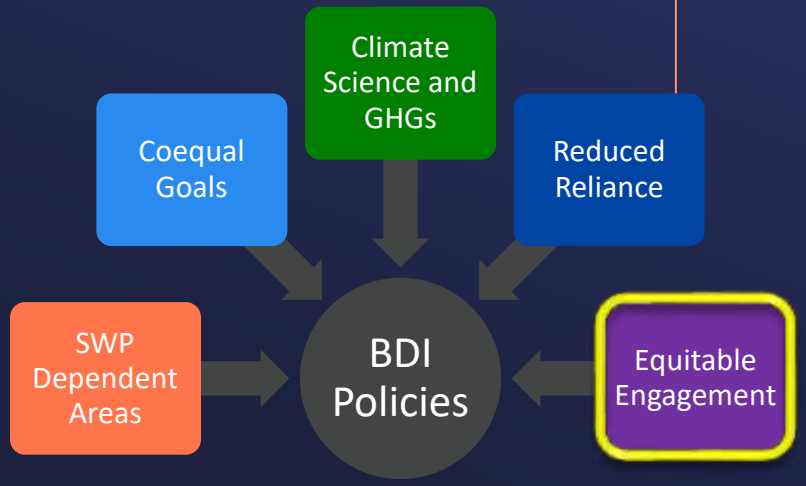
2A Protect water supply reliability and ~~water~~ quality while reducing reliance consistent with the Delta Reform Act[2]

Two of the core tenets of Metropolitan's mission statement are to provide reliable and high-quality water supplies to its service area. The Delta is a major pathway for the source of water for most of the state and the sustainability of Delta water supplies is a critical element of Southern California's water reliability. This reliability is protected through science-based regulatory frameworks, long term water supply planning, collaborative partnerships, ~~and~~ pursuing water supply infrastructure solutions~~.~~ while reducing reliance on the Delta.

[2]As described in California Water Code § 85021



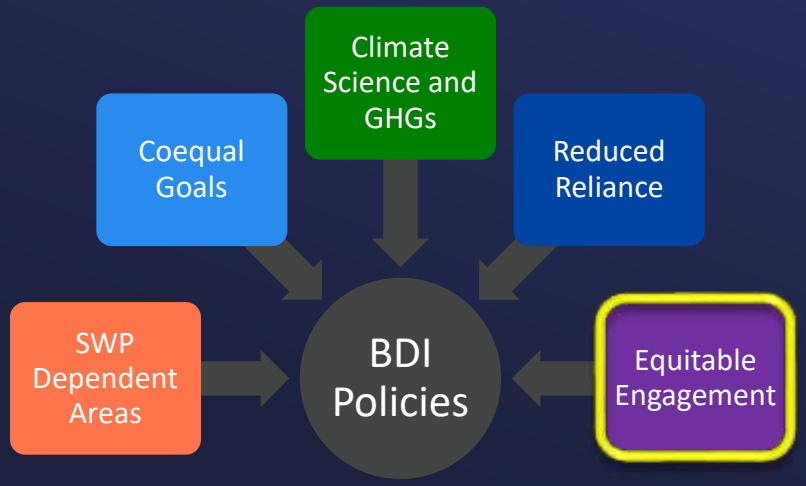
Latest Feedback Incorporated



Feedback Area	Change to Policy Framework and Attachment 1
SWP Dependent Areas	Reference to SWP Dependent Areas removed in Policy Objective 1 descriptor
Coequal Goals	Added Coequal Goals language to Policy Objective 2 and a sentence to define Coequal Goals in Attachment 1, per the Delta Reform Act
Climate Science and GHGs	Additional sentence added to Policy Objective 3 descriptor regarding climate science and emission reductions.
Reduced Reliance	Additional language added to Policy Principle 2A and to Attachment 1 descriptor.
Equitable Engagement	Policy Principle 3B descriptor now includes underserved communities, environmental justice groups and more proactive engagement.

3B Foster broad and inclusive engagement of Delta interests and beneficiaries

The Bay-Delta is a lifeline to multiple entities with diverse interests including tribes, public water agencies, local, state and federal agencies, non-governmental organizations, underserved communities, environmental justice groups and agricultural interests. ~~Engagement can yield new perspectives on Bay-Delta related issues and identify opportunities for collaboration.~~ Metropolitan embraces a proactive approach to seeking and sustaining engagement with all communities to foster new perspectives on Bay-Delta related issues and identify additional opportunities for collaboration.



Revised Framework

Bay-Delta Policy Objectives

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

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

Board Action

Options

Option #1

Adopt the revision and restatement of Bay-Delta Policies.

Option #2

Do not adopt the revision and restatement of Bay-Delta Policies.

Staff Recommendation

Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

Imported Water Committee

Update on Delta Conveyance Draft EIR

Item 6a

October 10, 2022

Update on Delta Conveyance Project Draft EIR

October Agenda (part 1)

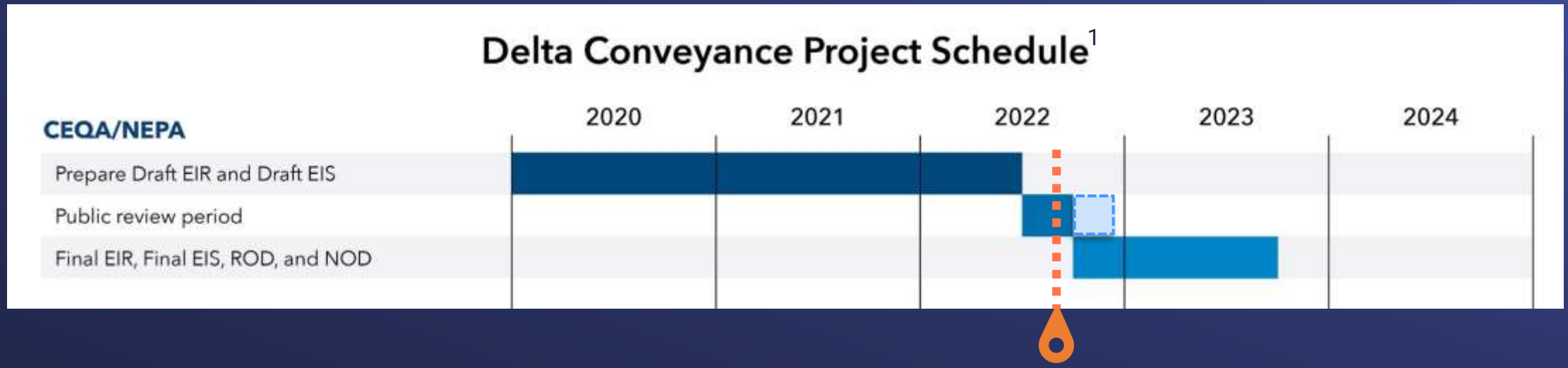
- Project Overview
- Water Supply Reliability and Resiliency
- One Water and Delta Conveyance

November Agenda (part 2)

- Project Overview (recap)
- In-Delta engagement during DEIR development
- Tribal Cultural Resources

Proposed Delta Conveyance Project
Project Overview

Delta Conveyance Project Planning Timeline



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

Public Draft EIR
Project Objectives

The Project Purposes

CLIMATE RESILIENCY	Addresses climate change, extreme weather and rising sea-levels in the Delta for the SWP
SEISMIC RESILIENCY	Minimizes health/safety risk to public from earthquake-caused reductions in water delivery quality and quantity from the SWP
WATER SUPPLY RELIABILITY	Restores and protects ability to deliver SWP water in compliance with regulatory and contractual constraints
OPERATIONAL FLEXIBILITY	Provides SWP operational flexibility to improve aquatic conditions and manage risks of additional future constraints

Project Alignments

Three Alignment Options

- Central
- Eastern
- Bethany – Proposed Project

Four Capacity Options

- 3,000 cfs
- 4,500 cfs
- 6,000 cfs – Proposed Project
- 7,500 cfs

Comparing WaterFix and Proposed Delta Conveyance Project

	California WaterFix aka "Twin Tunnels" (2017)	**Proposed Delta Conveyance Project aka "Single Tunnel"** (current)
Conveyance	Two tunnels, 35 miles each	One tunnel, 45 miles
Capacity	9,000 cfs	6,000 cfs
Number of Intakes	3	2
Alignment	Through center of Delta	Along east side, avoiding central Delta
Potential Agricultural Land Impact	Approximately 3,550 acres	Approximately 2,400 acres
Construction Traffic on Highway 160	Yes	No
Forebays Needed	Yes, 2	None, connect directly to Bethany Reservoir
Number of Barge Landings	4	None
Tunnel Shaft Launch Sites	Located at intakes and sites away from intakes	Located away from intakes
Tribal Consultation	Yes	Yes, formally under AB 52

Proposed Delta Conveyance Project
Water Supply Reliability and Resiliency

Proposed Delta Conveyance Project

Water Supply Reliability and Resiliency[1]

Modeling climate change, today[2] and into the future

Flashier storms present risks and opportunities

SWP water deliveries (with & without project)

Uncertainties ahead and other considerations

[1] Project objectives for the proposed Delta Conveyance Project are noted on this slide as "water supply reliability and resiliency" however project objectives per Department of Water Resources' Draft Environmental Impact Report released on July 27, 2022 include climate resiliency, seismic resiliency, operational resiliency and water supply reliability.

[2] "today" represents the "existing conditions" as modeled in the Draft Environmental Impact Report

Modeling California's Water Supply

Climate Change Assumptions Developed by Experts

DWR's Climate Change Technical Advisory Group

Global Climate Models (GCM's)

- Global
- Western U.S.
- California
- 10 GCM's for CA water planning

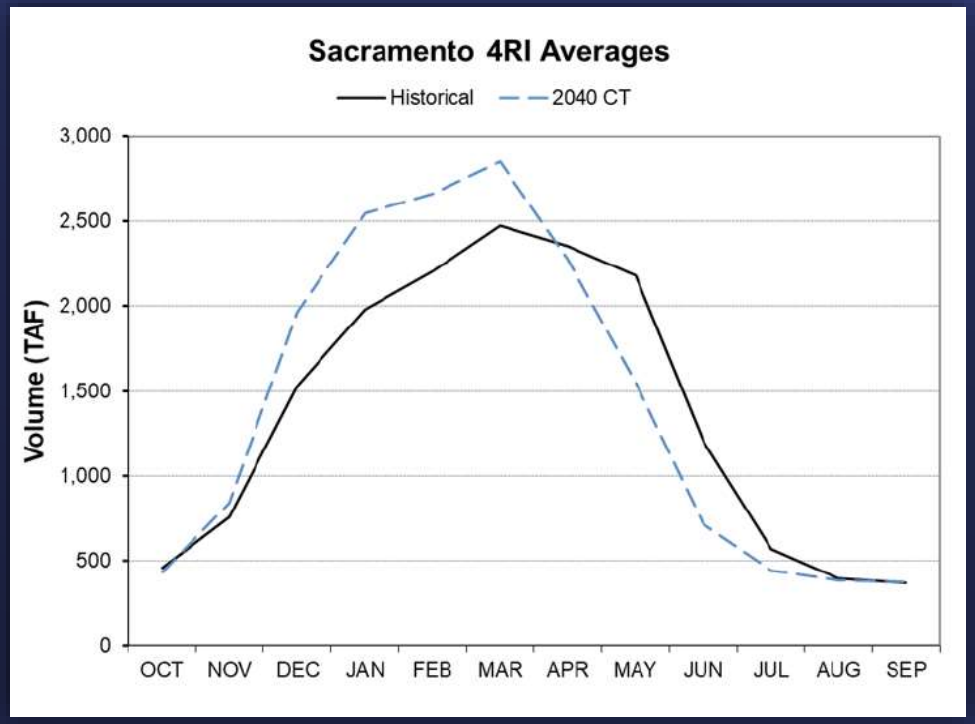
Delta Conveyance Project Climate Assumptions

	2020 Existing Conditions	2040 Scenarios[1]
Modeled Hydrology	Current Hydrology	Climate Change Hydrology
Sea Level Rise	Existing Conditions	+1.8 feet at Golden Gate[2]
South of Delta SWP & CVP Demands	Up to Full Contract	Up to Full Contract

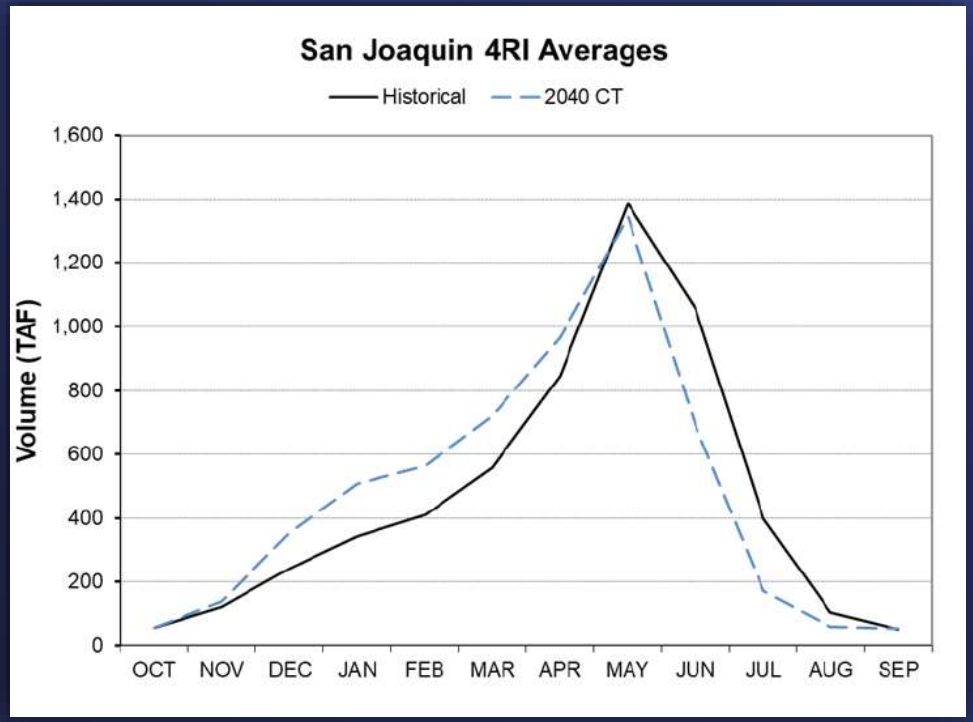
[1]2040 scenarios discussed include No Project and Proposed Project (Bethany Alternative)
[2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet

Modeling California's Water Supply

Significant Changes in Runoff Timing and Quantity Projected in 2040



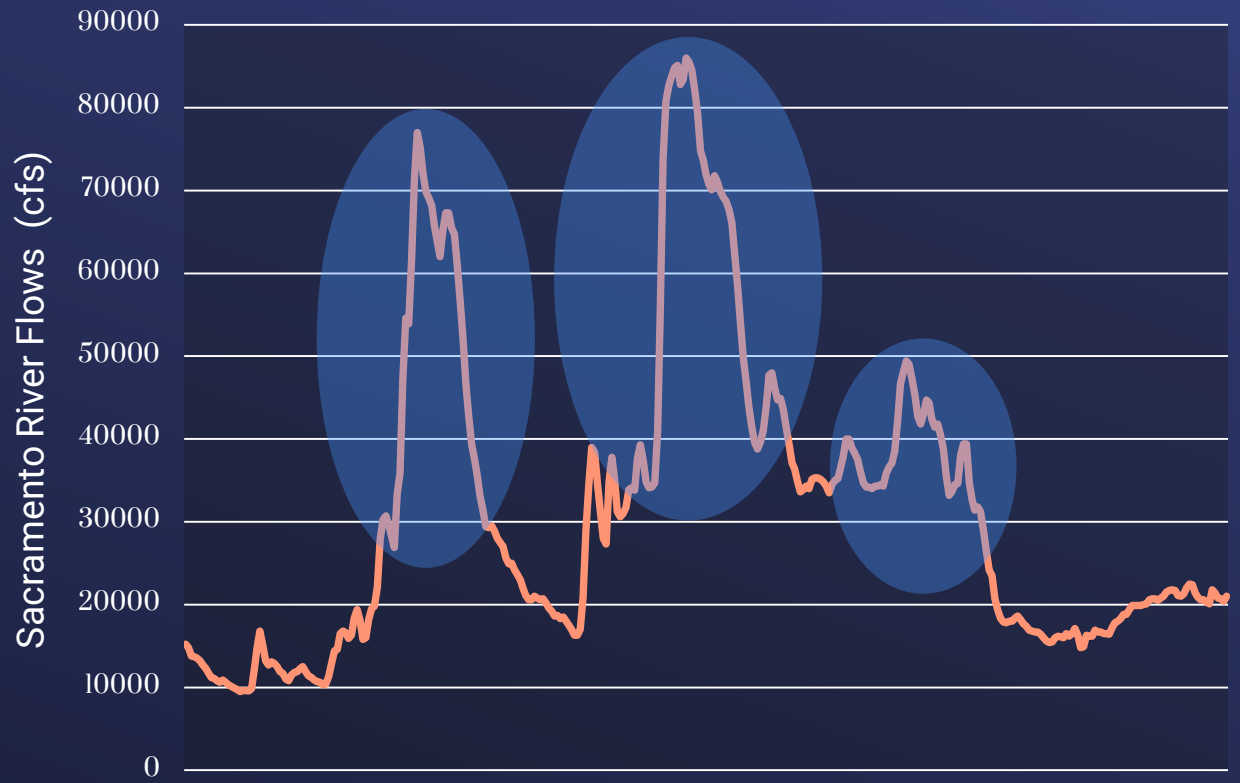
Delta Watersheds Projected to Be Wetter
Average Precipitation Increases of 2.7-4.8%[1]



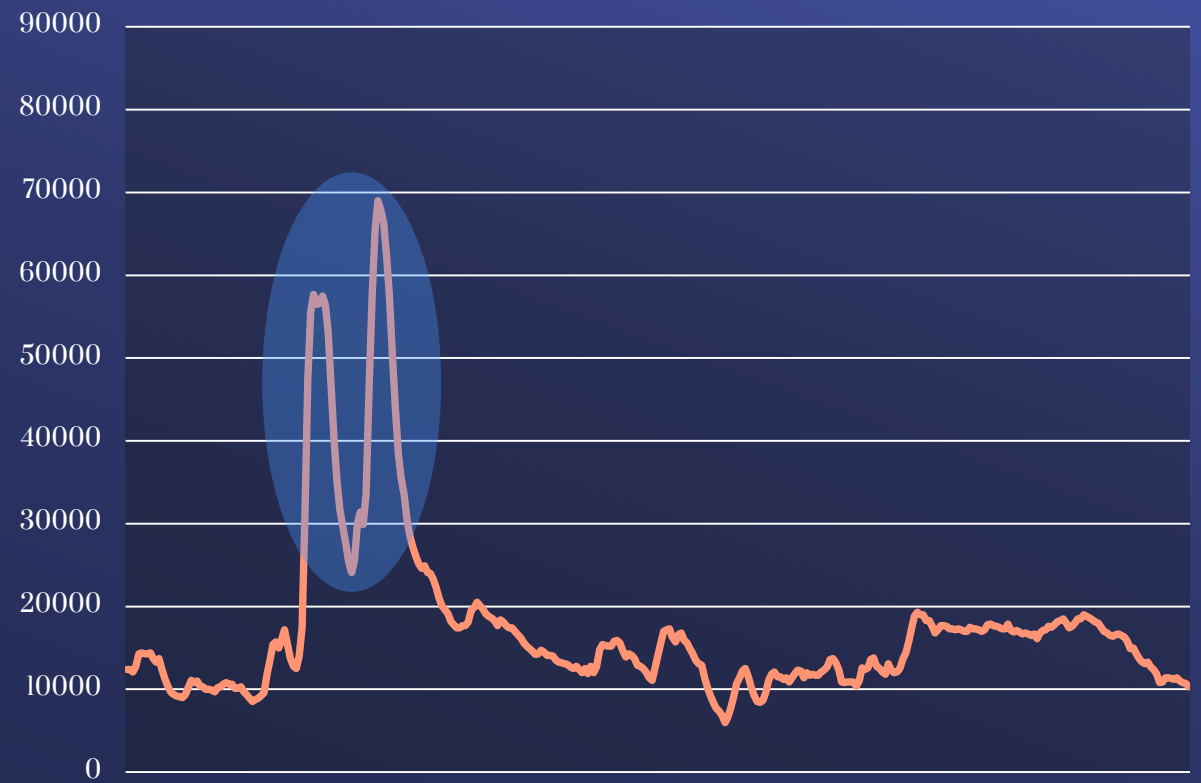
[1]DCP Draft EIR Appendix 5A, Section B – Figure 5A-B4.3

Flashier Storm Events Present Risks and Opportunities

High Flow Events Occur in Various Water Year Types



Wet Year
(2011 Water Year)

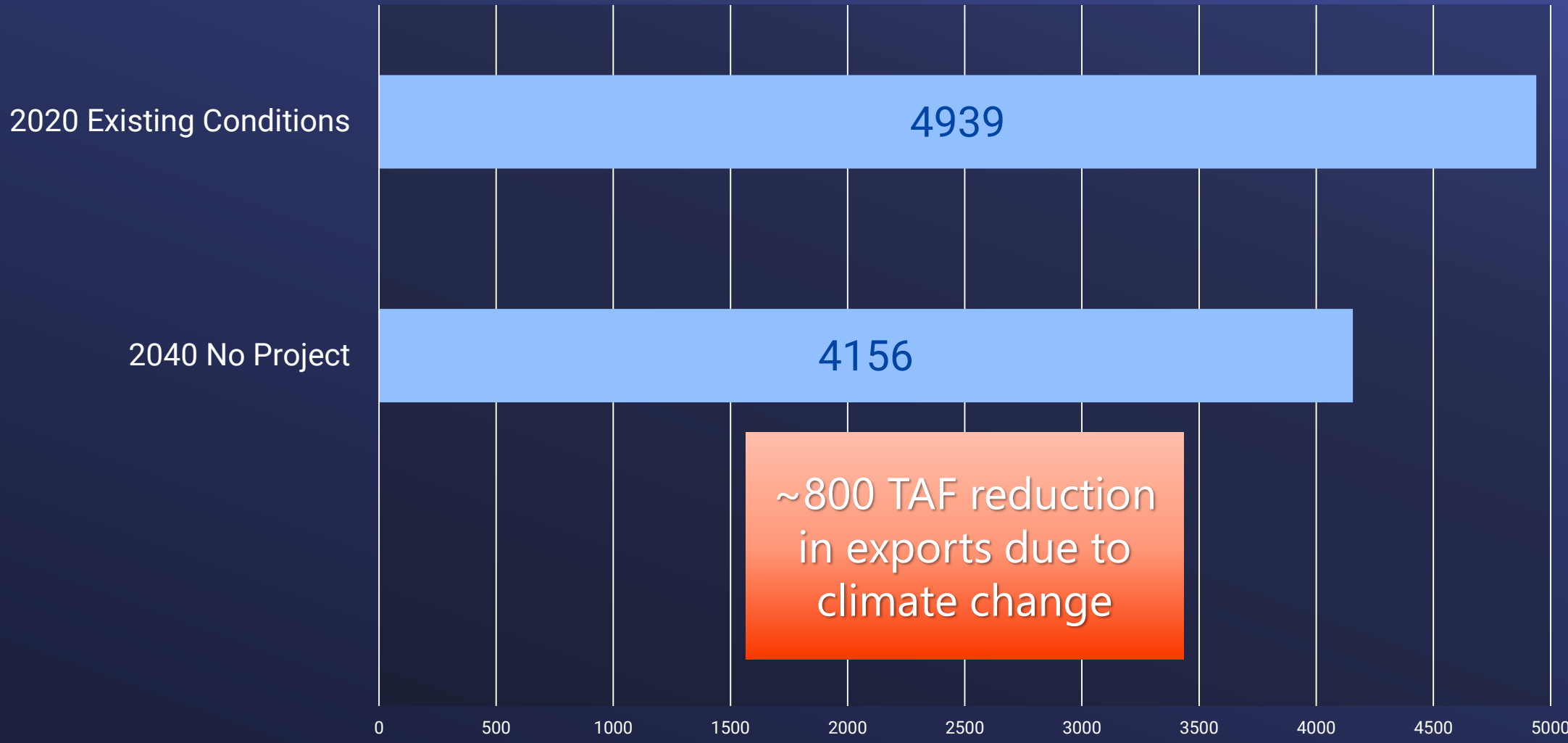


Dry Year
(2013 Water Year)

Source: Department of Water Resources Dayflow data https://data.ca.gov/dataset/dayflow

Projected Decline in Exports Due to Climate Change

Total Delta Exports Long-Term Average (TAF)[1,2,3,4]



[1]2040 scenarios discussed include No Project and Proposed Project (Bethany Alternative), [2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet
[3]Total Delta Exports includes both State Water Project and Central Valley Project water exports, [4]Source: Table 6A-3 of DCP Draft EIR

Modeling California's Water Supply

DCP Operations Assumptions[1,2,3]

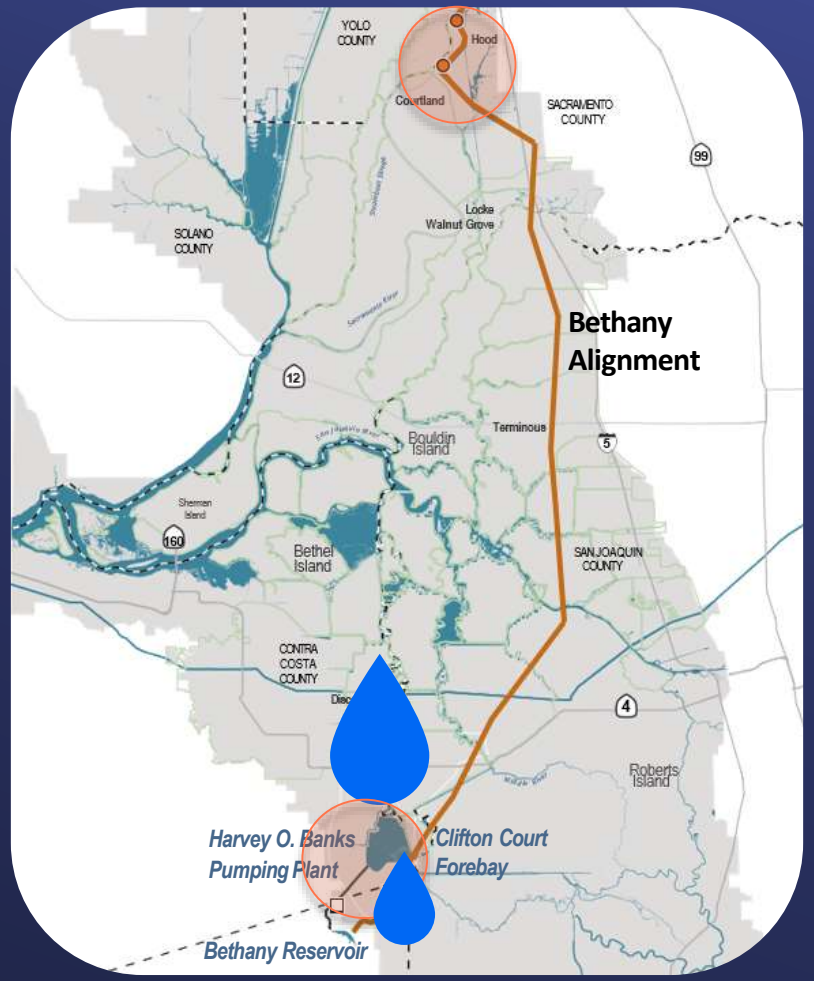
Dual Conveyance

South Delta Diversion (*through Delta*)

North Delta Diversion (*one tunnel*)

South Delta Diversions

- Generally prioritized over North Delta Diversion
- Operated under existing regulatory framework



North Delta Diversion Intakes (NDD)

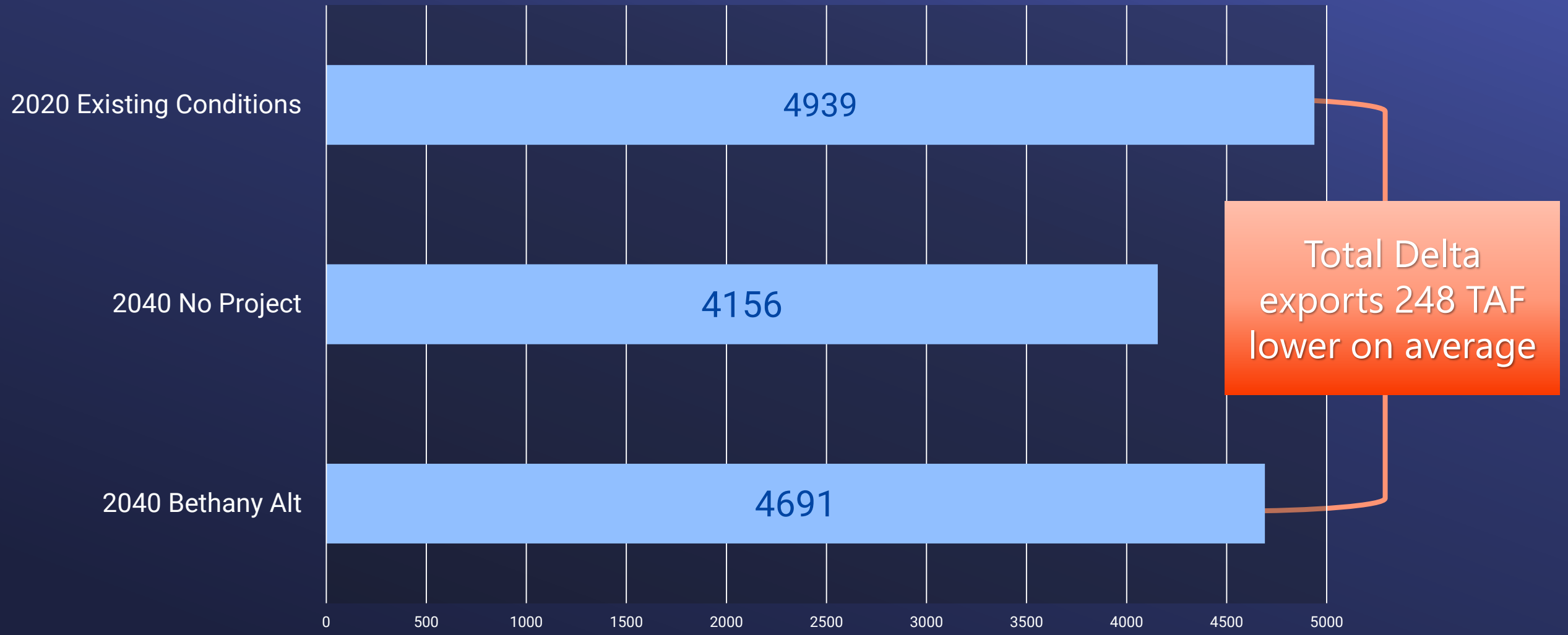
- 6,000 cfs max capacity
- Pulse protection
- State of the art fish screens
  - 0.2 ft./sec max approach velocity
  - 0.4 ft./sec min sweeping velocity
- Bypass flows
- Low-level pumping
- Only SWP diversions at the NDD

NDD Intakes are designed to withstand 10.2 ft of sea level rise and a 200-year flood event

[1]Regulatory Framework – Draft EIR operations include Water Rights Decision D-1641, 2019 Biological Opinions (USFWS & NMFS) and 2020 Incidental Take Permit (2020 ITP)
[2]2020 modeling is for Existing Conditions and 2040 scenarios discussed included No Project and Proposed Project (Bethany Alternative)
[3]H++ corresponds to Ocean Protection Commission's (OPC's) extreme scenario resulting from loss of West Antarctic ice sheet

Exports Decline due to Climate Change, Even with Project

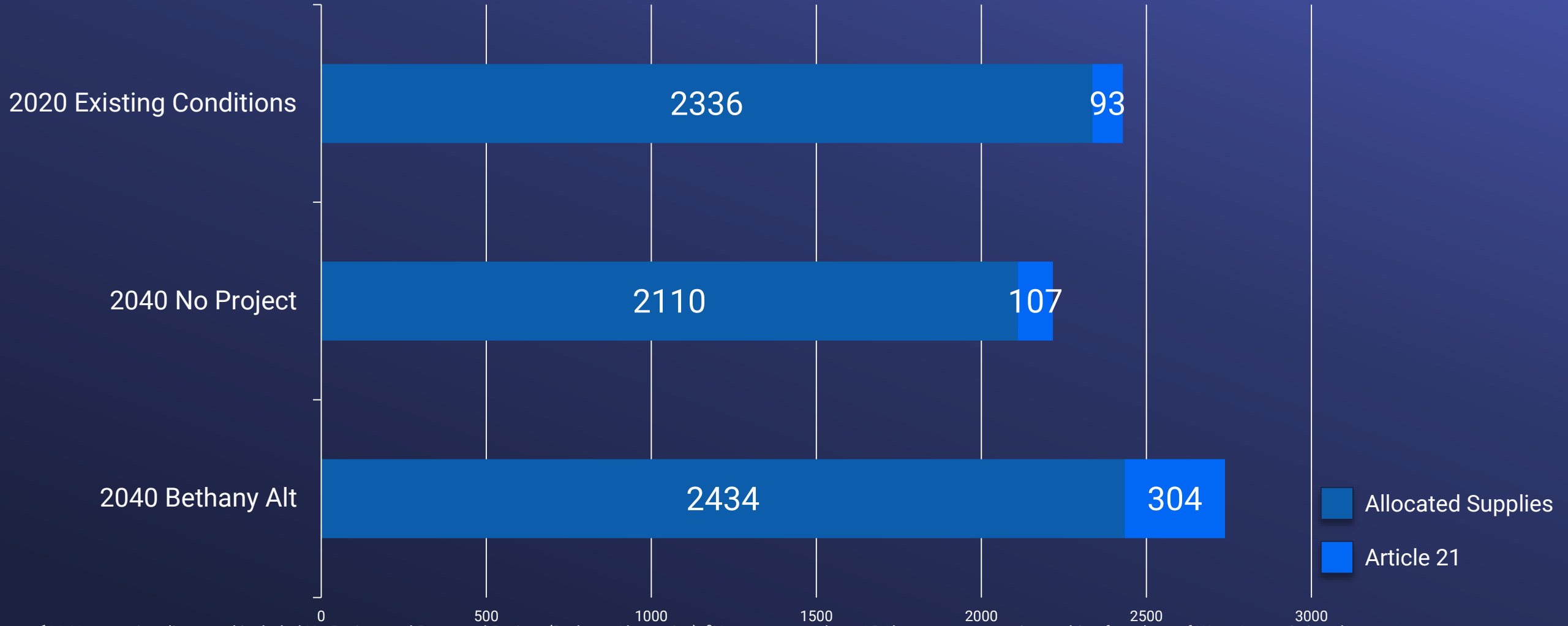
Total Delta Exports, Long-Term Average (TAF)[1,2,3,4]



[1]2040 scenarios discussed include No Project and Proposed Project (Bethany Alternative), [2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet
[3]Total Delta Exports includes both State Water Project and Central Valley Project water exports, [4]Source: Table 6A-3 of DCP Draft EIR

Adapting to High Flow Events Amid Climate Change

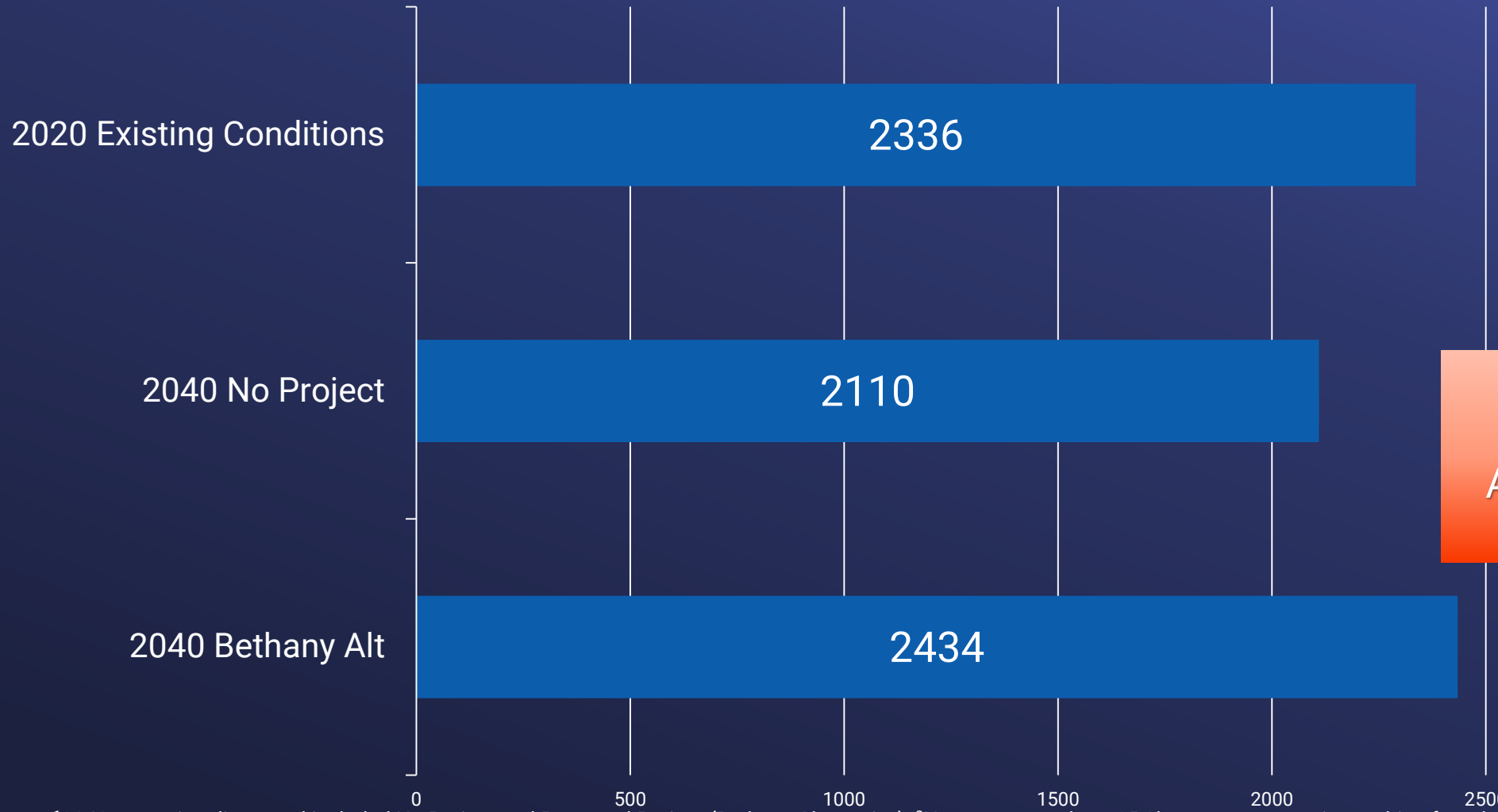
SWP Deliveries, Long Term Average (TAF)[1,2,3]

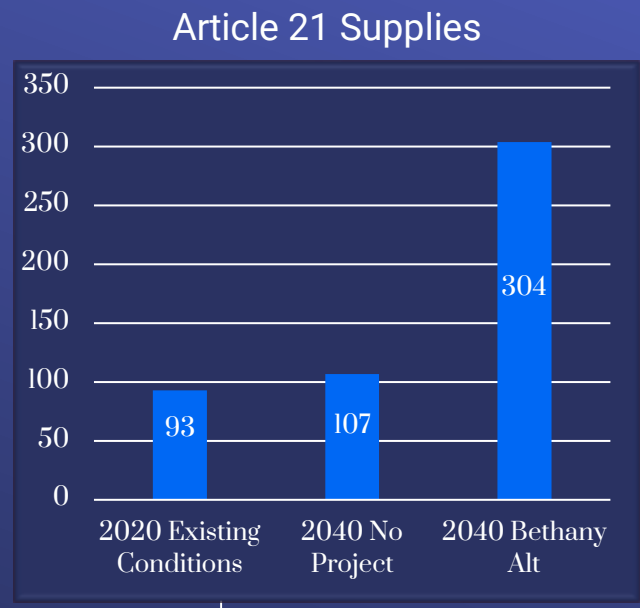


[1]2040 scenarios discussed included No Project and Proposed Project (Bethany Alternative), [2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet
[3]Allocated supplies include Table A and Article 56 Carryover supplies as shown in Table 6A-1 of the DCP Draft EIR.

Adapting to High Flow Events Amid Climate Change

SWP Deliveries, Long Term Average (TAF)[1,2,3]





Restores allocated supplies and increases Article 21 supplies from high flow events

Allocated Supplies

Article 21

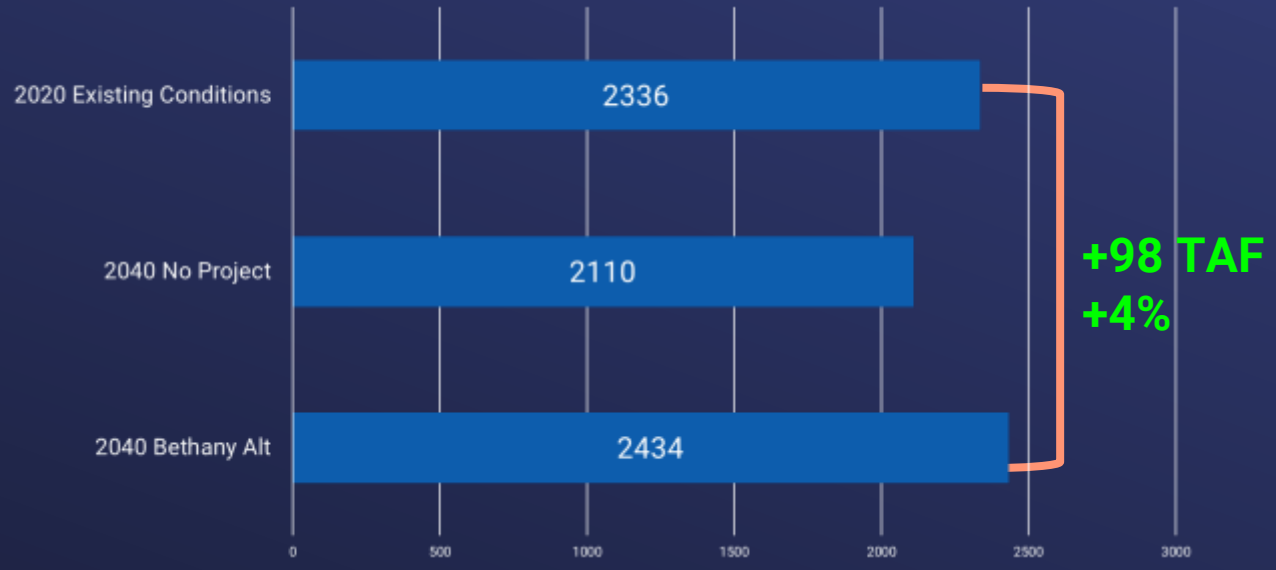
[1]2040 scenarios discussed included No Project and Proposed Project (Bethany Alternative), [2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet

[3]Allocated supplies include Table A and Article 56 Carryover supplies as shown in Table 6A-1 of the DCP Draft EIR.

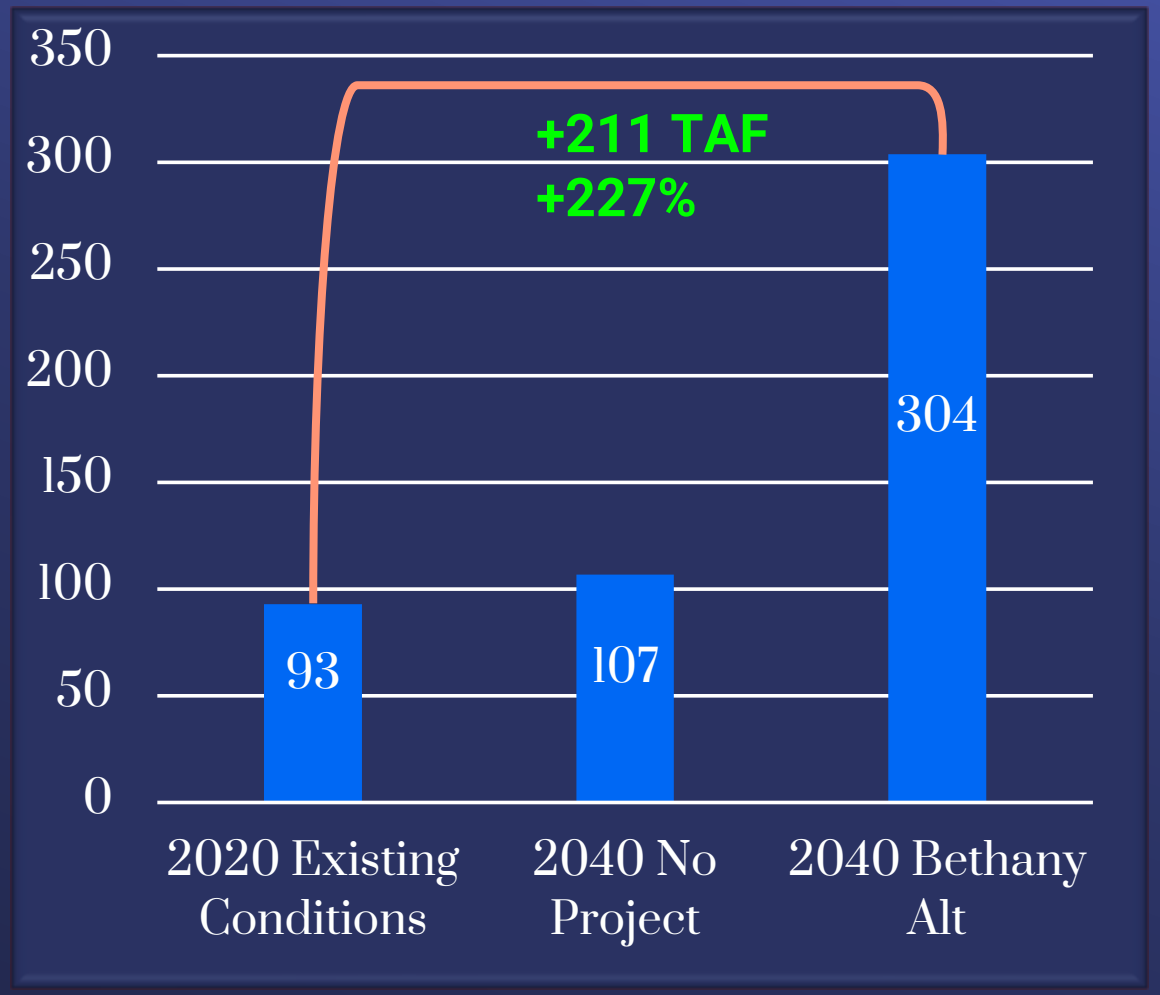
Adapting to High Flow Events Amid Climate Change

SWP Deliveries, Long Term Average (TAF)[1,2,3]

Allocated Supplies



Article 21 Supplies

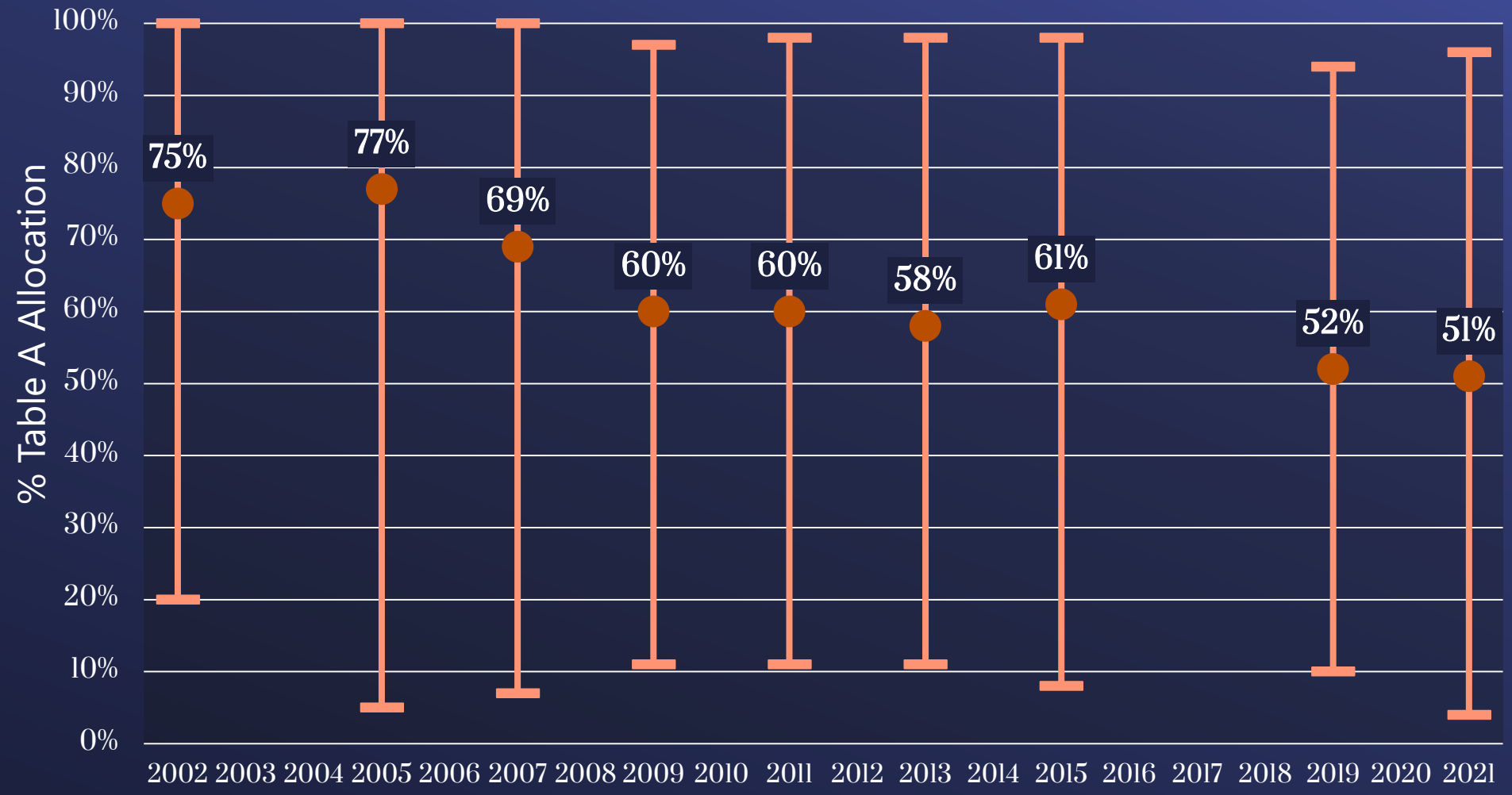


Capturing high flow events restores and protects water supply reliability

[1]2040 scenarios discussed included No Project and Proposed Project (Bethany Alternative), [2]H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet
[3]Allocated supplies include Table A and Article 56 Carryover supplies as shown in Table 6A-1 of the DCP Draft EIR.

Future Reliability Estimates Trending Downward

SWP Delivery Capability Report Average Table A Allocation



Considering Future Uncertainty

Key Areas of Uncertainty[1]

- Water Demands
- Climate Change and Sea Level Rise
- Future Regulatory Actions
- Future Project Operations

Metropolitan will conduct additional analyses to evaluate potential uncertainties that were not analyzed as part of the Draft EIR[2] and their implications for Metropolitan's long-term planning processes.

[1]Qualitative analysis of 2070 conditions includes discussions of key drivers and uncertainties surrounding water demands, climate change, sea level rise, and future water management and regulatory actions. These types of uncertainties apply to a wide range of future water management actions. [2]Additional analysis of uncertainties is not a requirement of the CEQA process. MWD's planning analyses are properly outside scope of DWR's permitting documents.

Delta Conveyance Project
One Water and Delta Conveyance

One Water and Delta Conveyance Putting the Pieces Together

One Water and Delta Conveyance

Delta Conveyance Project aims to protect and restore SWP water reliability

Vital To Metropolitan

- The SWP is a core component of Metropolitan's supply portfolio
- Metropolitan's infrastructure is designed and built to benefit from the SWP

Develop New Local Supplies

- Blending higher quality source water (SWP) will help in maintenance and development of local supplies (Recycled Water)

Surface Storage

- San Luis Reservoir Carryover
- Flexible Storage
- Diamond Valley Lake

Water Quality at Existing Metropolitan Treatment Facilities

- Blending with Colorado River Supplies at Weymouth, Diemer, and Skinner Treatment Plants

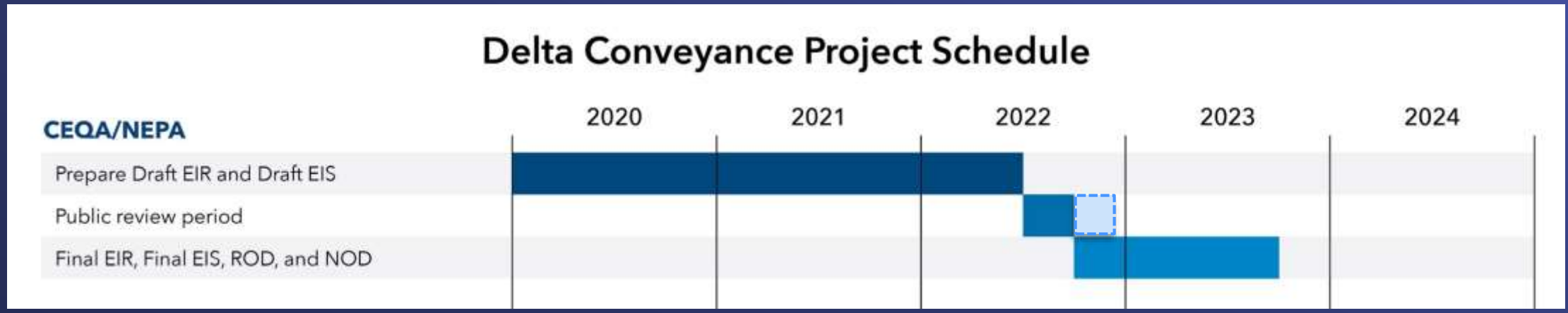
SWP Groundwater Banking

- Central Valley Programs
- High Desert Water Bank

Local Groundwater Recharge

- Supply for In-Service Area Groundwater Basins
- Conjunctive Use Programs

Delta Conveyance Project Planning Timeline



Future DCP updates to MWD Committee/Board[1]

- Regular Delta Conveyance Project Updates (Ongoing)
  - Delta Conveyance Design & Construction Authority
  - Delta Conveyance Finance Authority
  - Project development (planning / permitting activities)
- Cost Estimate (Fall 2023 - Spring 2024)
- Cost Benefit Analysis (Fall 2023 - Spring 2024)
- Continued Project funding discussion and board deliberation (by mid 2024)

[1]Proposed Delta Conveyance Project timeline and dates provided above are subject to change

Key Takeaways Supply Reliability

- Significant Changes in Runoff - Timing and Quantity[1]
- High Flow Events Occur in Various Water Year Types[2]
- Without the Project, Exports Decline ~800 TAF[3] by 2040
- Flashier Storm Events Present Risks & Opportunities
- Capturing high flow events restores and protects water supply reliability[4]

[1]Draft EIR Appendix 5A, Section B.6.1 [2]Source: Department of Water Resources Dayflow data https://data.ca.gov/dataset/dayflow [3]Total Delta Exports including both State Water Project and Central Valley Project water exports in Existing Conditions and 2040 scenarios as modeled in Chapter 5 and Appendix 5A of DCP Draft EIR and shown in Table 6A-3 [4]2040 scenarios discussed include No Project and Proposed Project (Bethany Alternative), H++ corresponds to OPC's extreme scenario resulting from loss of West Antarctic ice sheet and allocated supplies include Table A and Article 56 Carryover supplies as shown in Table 6A-1 of the DCP Draft EIR.

Next Steps

Ongoing Staff Efforts

- Support Member Agency Outreach
- Provide Comments by December 16th Deadline

November Agenda (part 2)

- Project Overview (recap)
- In-Delta engagement during DEIR development
- Tribal Cultural Resources


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

• Water Surplus and Drought Management Update *Conditions as of 9/26/2022*

Summary

This report accounts for water supply, demand, and storage conditions for calendar year (CY) 2022 as of September 26, 2022. The report also tracks the hydrologic conditions for water year (WY) 2021-2022.

Imported supply available to help meet demand is currently estimated to be 1.28 million acre-feet (MAF) which includes 258 thousand acre-feet (TAF) of State Water Project (SWP) supply and 1,018 TAF of Colorado River supply. Metropolitan's SWP supply includes 134 TAF of human health and safety (HH&S) supply from the Department of Water Resources (DWR). Metropolitan's Colorado River supply is based on the United States Bureau of Reclamation's (USBR) daily forecast of water use for California's Colorado River water users for this year. The current USBR forecast indicates that several higher priority water users are projected to use significantly less water than the forecast that was used for last month's WSDM report in part due to monsoon activity. This has decreased the reduction to Metropolitan due to higher priority water users to 16 TAF. Metropolitan will be able to satisfy demands by withdrawing a like amount from storage. Also, the USBR forecast shows that the Imperial Irrigation District (IID) is currently projected to use less than their submitted water order.

The current demand on Metropolitan is estimated to be 1.69 MAF. Since last month's report, the annual estimate of member agencies' consumptive demand has continued to decrease mainly due to the region's ongoing conservation efforts. To date, affected member agencies under the Emergency Water Conservation Program have used 40 percent less than what was expected without emergency conservation and 8 percent less supply than their volumetric limits. Thus, agencies under the first compliance path (Path 1) will continue with current one-day-a-week watering restrictions for the month of November. Since supply is less than demand, Metropolitan will satisfy this gap through storage withdrawals.

Purpose

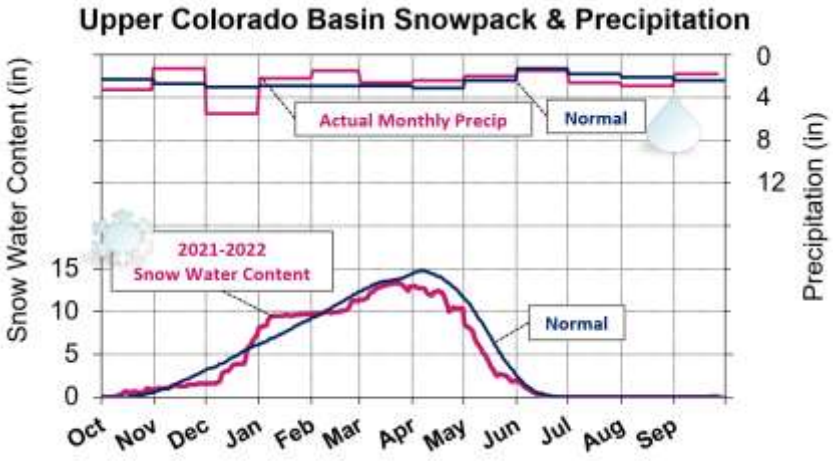
Informational

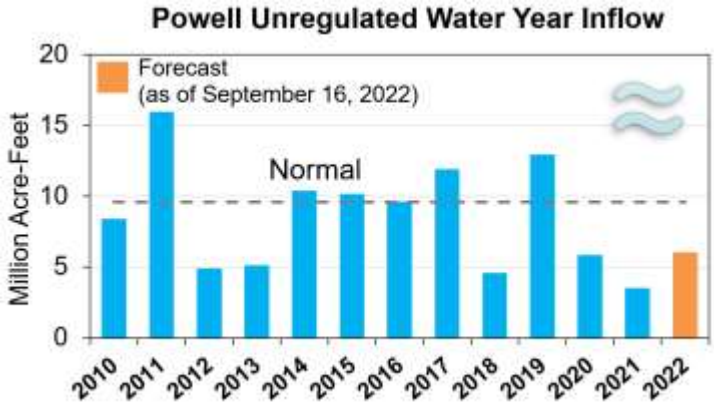
Attachments

Attachment 1:	Projected 2022 WSDM Storage Detail (5 percent SWP Table A allocation)
Attachment 2:	Agreements to Exchange or Return Stored Water, Potential Magnitude of California's Drought Contingency Plan Contribution, and Cyclic Program Balances
Attachment 3:	Emergency Water Conservation Program Performance

Detailed Report

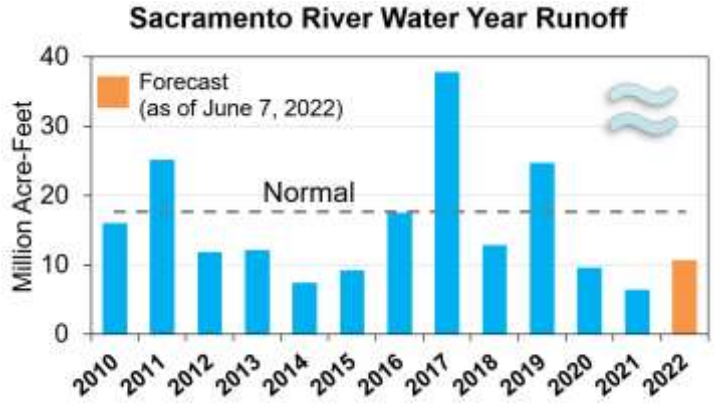
This Water Surplus and Drought Management (WSDM) report updates water supply and demand conditions for CY 2022 and developing hydrologic conditions for WY 2021-2022.





Upper Colorado River Basin

- ❄ Snowpack water content peaked in mid-March (13.3 inches or 91% of normal April 1).
- 💧 Normal precipitation to date (29.6 inches or 100% of normal).
- ≈ Runoff into Lake Powell for WY 2022 is forecasted at 63% of normal.

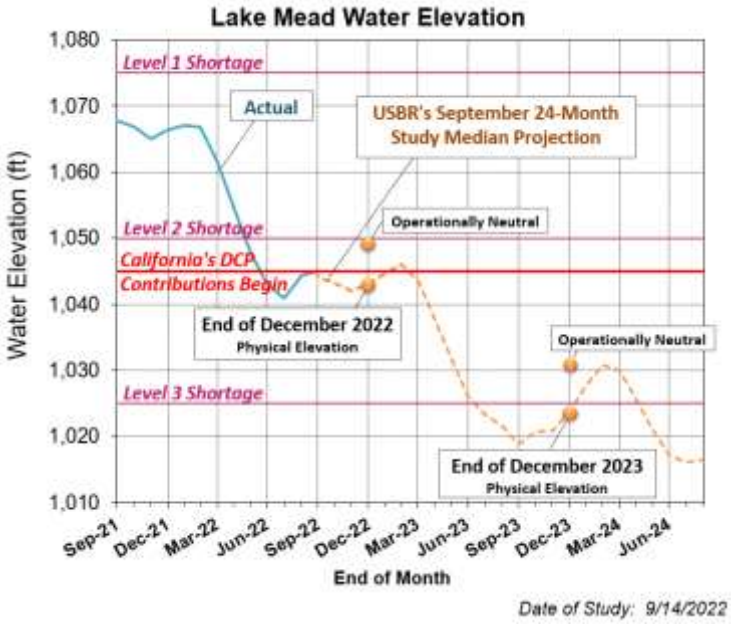


Sacramento River Basin

- ❄ Snowpack water content peaked low and early in mid-January (17.2 inches or 61% of normal April 1).
- 💧 Below normal precipitation at the 8 Station to date (43.0 inches or 81% of normal).
- ≈ Runoff into the Sacramento River for WY 2022 is forecasted at 60% of normal.

CRA Supplies	Acre-Feet
Basic Apportionment	*550,000*
IID/ MWD Conservation Program	*105,000*
CVWD - 2nd Amendment, Exchange of Additional Water	*38,000*
PVID Fallowing Program	*25,000*
Exchange w/ SDCWA (IID/Canal Lining)	*280,000*
Exchange w/ USBR (San Luis Rey Tribe)	*16,000*
Lower Colorado Water Supply Project	*9,000*
Bard Seasonal Fallowing Program	*3,000*
Quechan Diversion Forbearance	*6,000*
Quechan Seasonal Fallowing Program [1]	*0*
Higher Priority Water Use Adjustment [2]	*-16,000*
Total CRA Supplies [3]	**1,018,000**

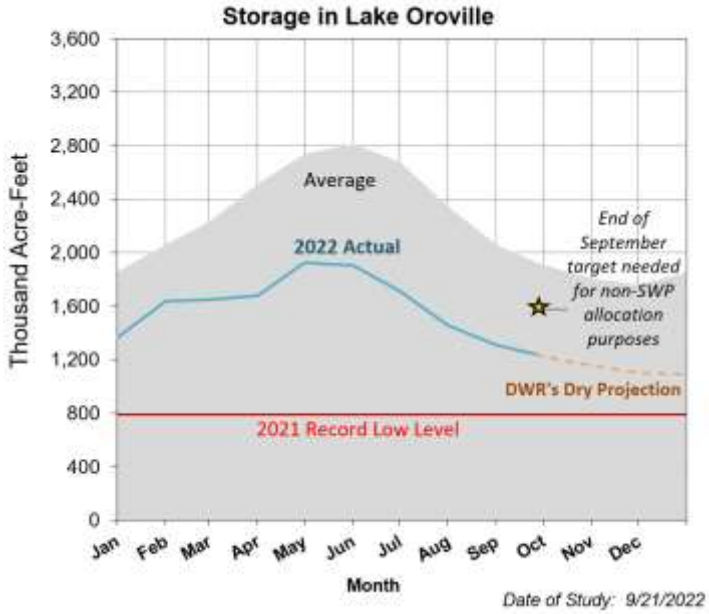
[1] Rounded to the nearest thousand.
[2] Per USBR Forecast (9/26/22).
[3] Total may not sum due to rounding.



- Lake Mead storage is currently 7.3 MAF or elevation 1,044.9 feet (28 percent of total capacity).
- The Lower Basin is at a Level 1 shortage in CY 2022. Supplies to Metropolitan will not be curtailed and Metropolitan will have full access to its Intentionally Created Surplus (ICS) in CY 2022 to fill the CRA.
- The Lower Basin will be in a first-ever Level 2a shortage in CY 2023. Under a Level 2a shortage, Metropolitan will not be impacted. However, it is uncertain how USBR's call for Basin states to develop additional conservation to protect critical elevations in Lakes Powell and Mead will impact Metropolitan.

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]	*14,000*
MWDOC/IRWD Partnership	*4,000*
Purchase of SDCWA's Semitropic Supply	*4,000*
Human Health & Safety Supply	*134,000*
Total SWP Supplies [3]	**258,000**
Total Supplies (CRA + SWP) (Prior to storage actions)	**1,276,000**

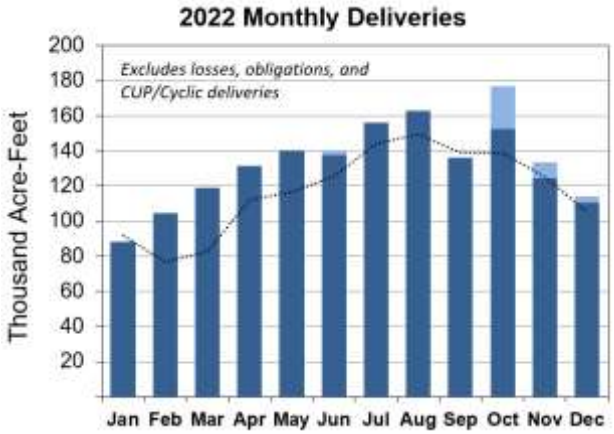
[1] Rounded to the nearest thousand.
[2] Current estimate subject to change based on buyer/seller participation and losses.
[3] Total may not sum due to rounding.



- In addition to the 5 percent Table A allocation, DWR is providing water for Contractors' unmet Human Health and Safety needs (HH&S). DWR expects Contractors receiving HH&S water to take mandatory conservation measures and return any HH&S water to the SWP in a future year. DWR has approved 134 TAF of HH&S supply for Metropolitan.
- Lake Oroville is currently at 1.24 MAF (35 percent of total capacity) or 64 percent of historical average as of the date of this report.
- The initial SWP Table A allocation for 2023 is expected to start low because the end of December storage in Lake Oroville is projected to be 1.1 MAF under dry conditions, below the target DWR has set for non-SWP allocation purposes.

Current Demand	Acre-Feet
Member Agency Consumptive [1]	*1,568,000*
Member Agency Replenishment	*40,000*
Coachella Valley Water District Agreement	*15,000*
Return to Imperial Irrigation District [2]	*0*
Exchange w/ San Luis Rey Tribe	*16,000*
System and Storage Losses	*50,000*
Cyclic Deliveries	*0*
Total Demands [3]	**1,689,000**

[1] Includes exchange w/ SDCWA (IID/Canal Lining) and CUP sales.
[2] Per USBR Forecast (9/26/22).
[3] Total may not sum due to rounding.

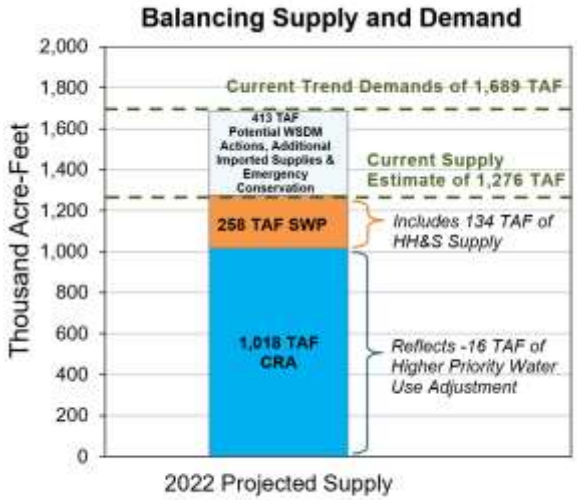


Even with ongoing conservation efforts, demands are projected to be higher than the 5-year average due to continued dry conditions and reduced local supplies.

MANAGING REGIONAL SUPPLY AND DEMAND

Supply/Demand Balance	Acre-Feet
Total Supplies	*1,276,000*
Total Demands	*1,689,000*
Current Balance Estimate [1]	**-413,000**

[1] Total may not sum due to rounding.



Dry-Year WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to satisfy the estimated supply/demand gap in 2022, enhance Metropolitan's capability of delivering supplies to the SWP Dependent Areas, and reduce storage withdrawals in 2022.

- Strategic withdrawals of water from dry-year storage reserves.
- Coordinating with member agencies to identify new drought actions targeted at Metropolitan's SWP Dependent Areas.
- Executed an agreement with DWR to allow for water withdrawals from Perris Flex storage at Castaic Lake.
- Increased exchange amounts with Arvin-Edison for Metropolitan to receive Friant surface water supplies.
- Maximizing use of Colorado River or stored supplies by using the Greg Avenue pump station and drafting water from Diamond Valley Lake to serve the Lakeview Pipeline and the Mills Plant.
- Advancing infrastructure improvements to reduce the impact of the current drought and provide future system flexibility.
- Working with member agencies to switch from service connections providing SWP supplies to alternate connections that use Colorado River supplies, both within and outside of the Operational Shift Cost-Offset Program.
- Purchasing San Diego County Water Authority's groundwater stored in the Semitropic Water Bank and leasing their pumping capacity.
- Partnering with non-member agencies such as the San Bernardino Valley Municipal Water District, a SWP Contractor, for exchange opportunities.
- Utilizing the Coordinated Operating Agreement with Municipal Water District of Orange County and Irvine Ranch Water District to enhance SWP supplies.
- Securing one-year transfers with various water districts north of the Sacramento-San Joaquin River Delta.
- Implementing the Emergency Water Conservation Program in the SWP Dependent Area.
- Receiving deliveries of HH&S supply from DWR to help meet demands in the SWP Dependent Area.
- Executed a Reverse Cyclic Program agreement with the Calleguas Municipal Water District to defer some deliveries to a future year.

2022 WSDM Storage Detail

WSDM Storage	1/1/2022 Estimated Storage Levels	CY 2022 Take Capacity [1]	2022 Total Storage Capacity
Colorado River Aqueduct Delivery System	**1,252,000**	**121,000**	**1,657,000**
Lake Mead ICS	1,252,000 [2]	121,000[3]	1,657,000
State Water Project System	**636,000**	**185,000**	**1,879,000**
MWD SWP Carryover [4]	38,000	38,000	350,000
DWCV SWP Carryover [4]			
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic Lake (DWR Flex Storage)	0	0	154,000
Lake Perris (DWR Flex Storage)	49,000	49,000 [5]	65,000
Arvin Edison Storage Program	136,000	17,000 [6]	350,000
Semitropic Storage Program	218,000	49,000 [7]	350,000
Kern Delta Storage Program	149,000	32,000	250,000
Mojave Storage Program	19,000	0	330,000
AVEK Storage Program	27,000	0	30,000
In-Region Supplies and WSDM Actions	**795,000**	**426,000**	**1,246,000**
Diamond Valley Lake	600,000	343,000	810,000
Lake Mathews and Lake Skinner	179,000	67,000	226,000
Conjunctive Use Programs (CUP) [8]	16,000	16,000	210,000
Other Programs	**674,000**	**11,000**	**1,181,000**
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	293,000	11,000	800,000
Total	**3,357,000**	**743,000**	**5,963,000**
Emergency	750,000	0	750,000
Total WSDM Storage (AF) [9]	**2,607,000**	**743,000**	**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 2021, released in May 2022. This amount is net of the water Metropolitan stored for IID in Lake Mead in an ICS sub-account, which IID can access to avoid an overrun.

[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] Available for withdrawal from Castaic Lake in 2022 pursuant to an MWD-DWR agreement.

[6] Take amounts dependent on exchange capabilities.

[7] Includes leasing 5,000 AF of return capacity from SDCWA. This provides Metropolitan the ability to withdraw more of its groundwater stored in the program.

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

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

Agreements to Exchange or Return Stored Water

	Future Returns [1]
CR Total (AF)	**802,000**
Water Stored for IID under the California ICS Agreement and its Amendment or the 2021 Settlement Agreement with IID	262,000 [2]
Storage and Interstate Release Agreement with Southern Nevada Water Authority	330,000 [3]
Coachella Valley Water District Agreement	210,000 [4]
SWP Total (AF)	**353,000**
DWR Flex Storage	219,000 [5]
Human Health & Safety	134,000 [6]
Total (AF)	**1,155,000**

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

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

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

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

[5] Flexible storage withdrawals from Castaic Lake and Lake Perris must be returned within five calendar years. Metropolitan is required to return 170,000 AF by 2026 for withdrawals in 2021. Metropolitan is planning to withdraw nearly all of the remaining 49,000 AF in 2022 and will need to return this amount by 2027.

[6] Metropolitan's scheduled CY 2022 Human Health & Safety deliveries. Any water taken must be returned by 2027.

Potential Magnitude of California's Drought Contingency Plan Contribution

	2022	2023	2024	2025	2026
Likelihood of Required California Drought Contingency Plan Contribution [1]	0%	0%	73%	70%	64%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	0	272,000	296,000	294,000

[1] Results from USBR's September 2022 Colorado River Mid-Term Modeling System (CRMMS) model run.

Cyclic Program Activity

CY	Starting Balance (AF)	CY Actions (AF)				Ending Balance (AF)
		Cyclic Pre-Delivery	Cyclic Cost-Offset Pre-Delivery	Total Pre-Delivery	Sale Out of Cyclic	
2019	51,000	147,000	19,000	166,000	91,000	126,000
2020	126,000	2,000	0	2,000	50,000	78,000
2021	78,000	0	0	0	28,000	50,000
2022 [1]	50,000	0	0	0	32,000	18,000

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

Emergency Water Conservation Program Performance

Notes:
1. *Guidance line is a representation of the total volumetric limit on a cumulative daily basis. It assumes a linear path, unless a monthly pattern is provided by a member agency.*
2. *Performance is the acre-foot and corresponding percent deviation from the guidance line, per as of date.*
3. *For Path 2 agencies, monthly penalties paid will be credited if actual total water use is below the total volumetric limit at the end of the seven-month period.*
4. *Tracking of cumulative daily deliveries only include those agencies planning to receive SWP supplies June - December 2022.*
5. *Projected demand as of April 26, 2022.*

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

Imported Water Committee

Update on WSDM and Status of Emergency Water Conservation Program

Item 6b

October 10, 2022

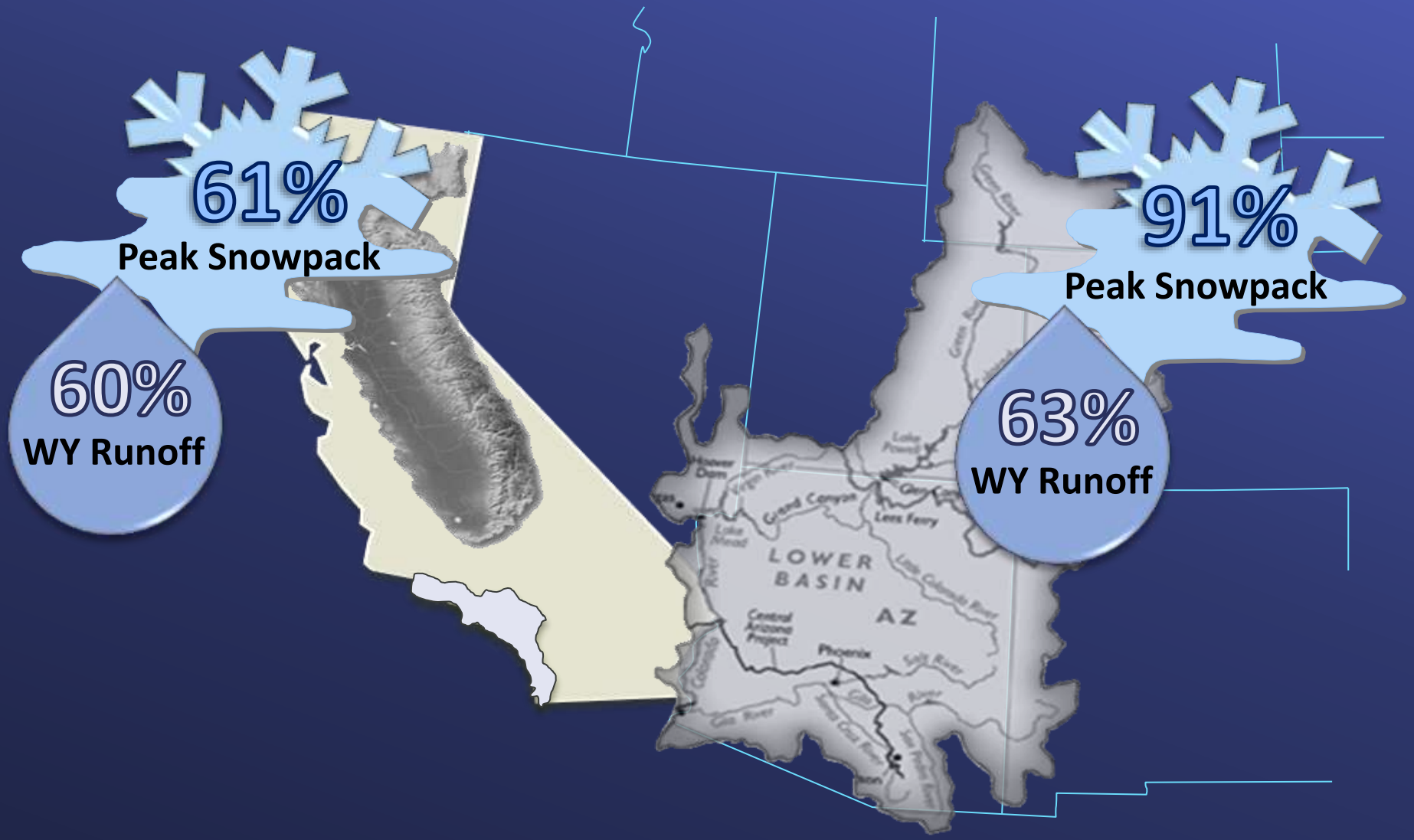
Agenda

1. Water Year 2021/22 Recap
2. WSDM Update
3. Emergency Water Conservation Program Update
4. Planning for Calendar Year 2023

Water Year 2021/22 Recap

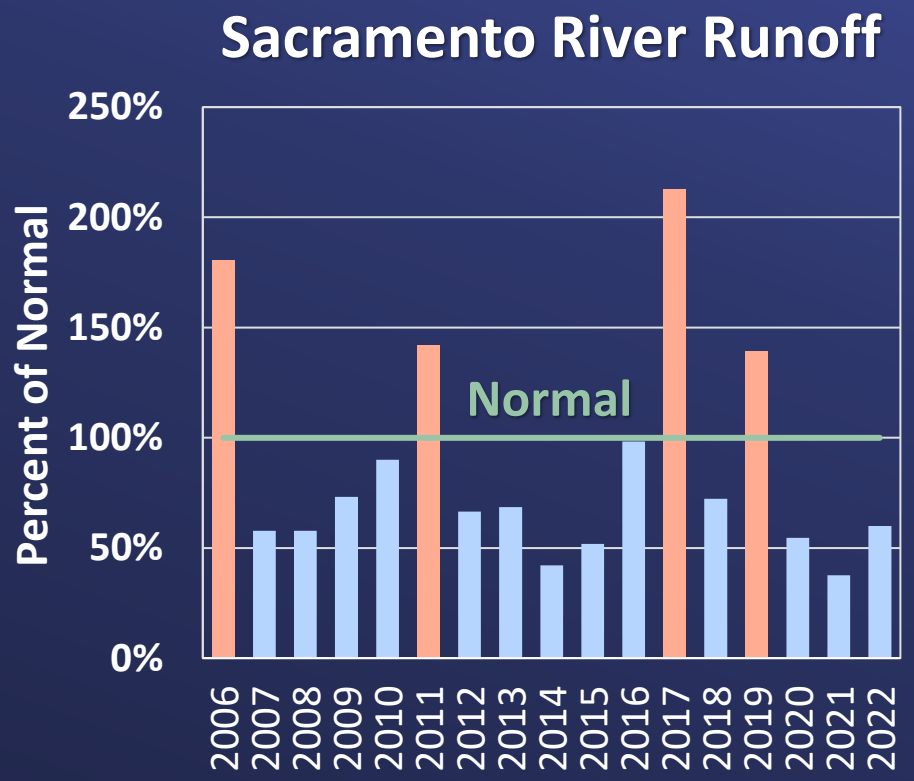
Water Year 2021/2022

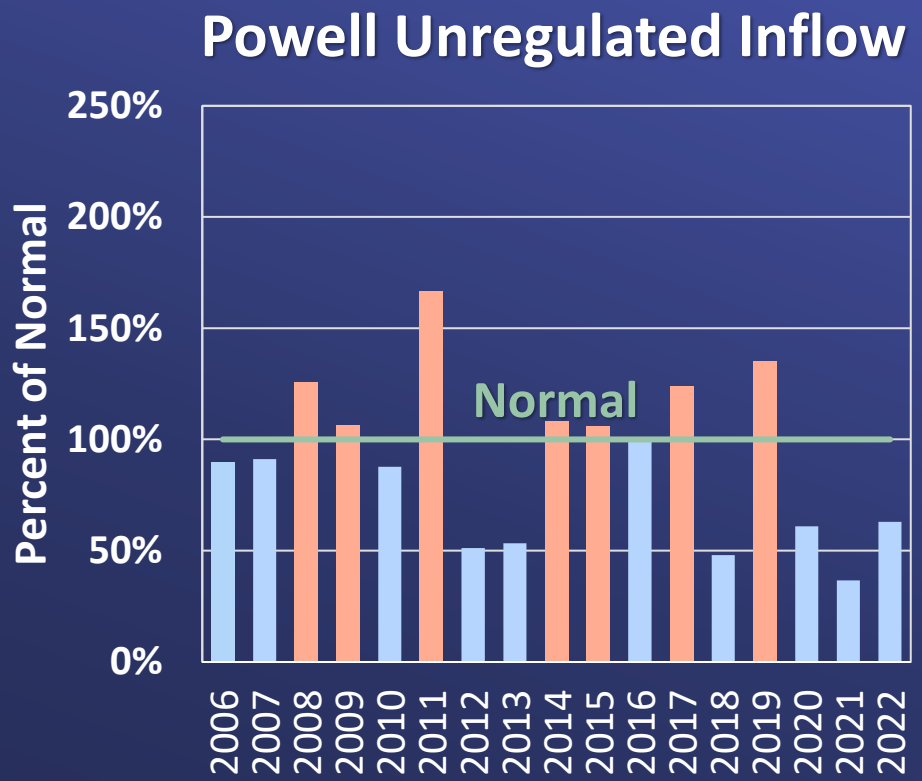
Peak Snowpack and Runoff Conditions



Water Year 2021/2022

Continuation of Below Average Runoff

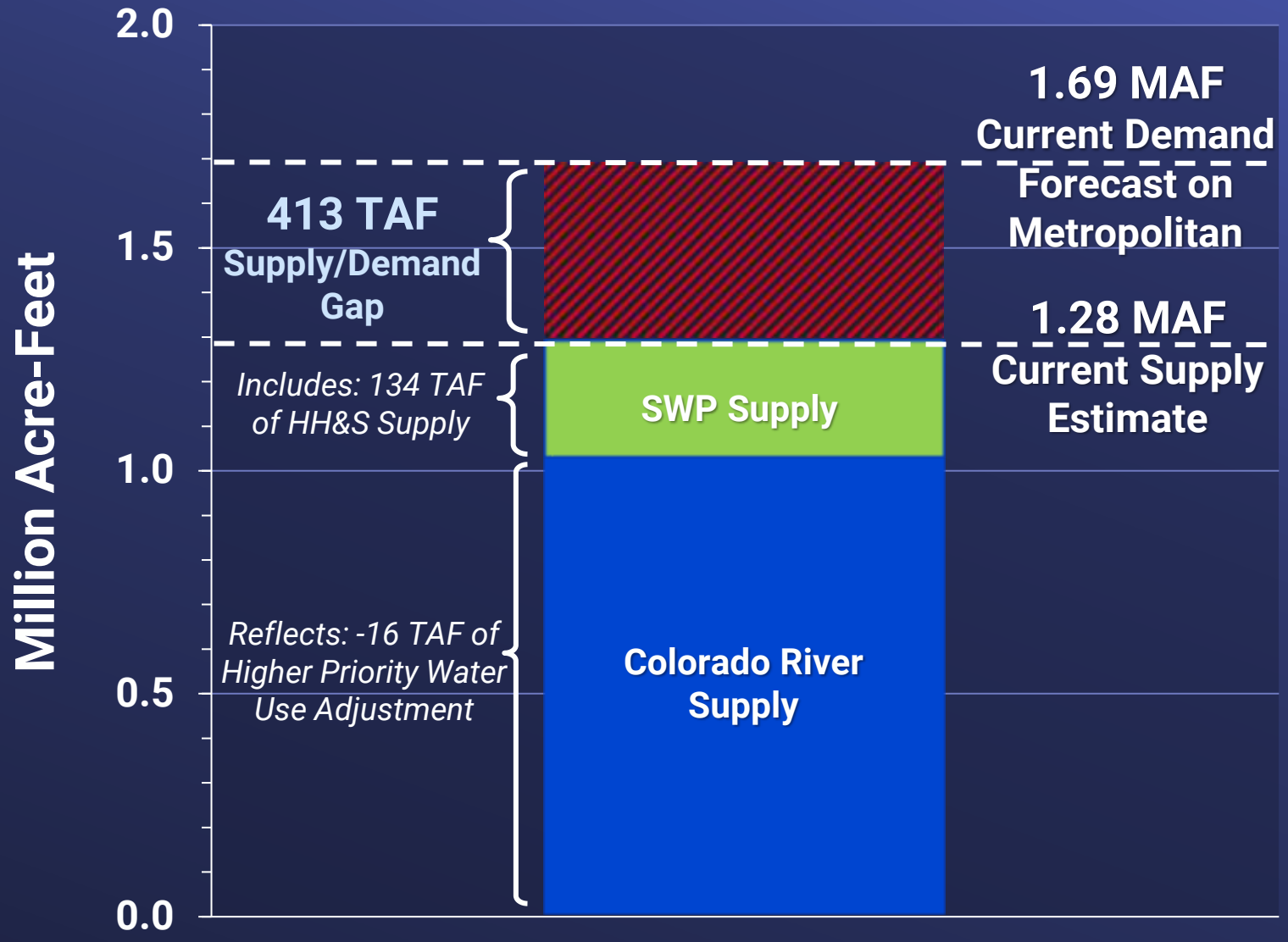




WSDM Update

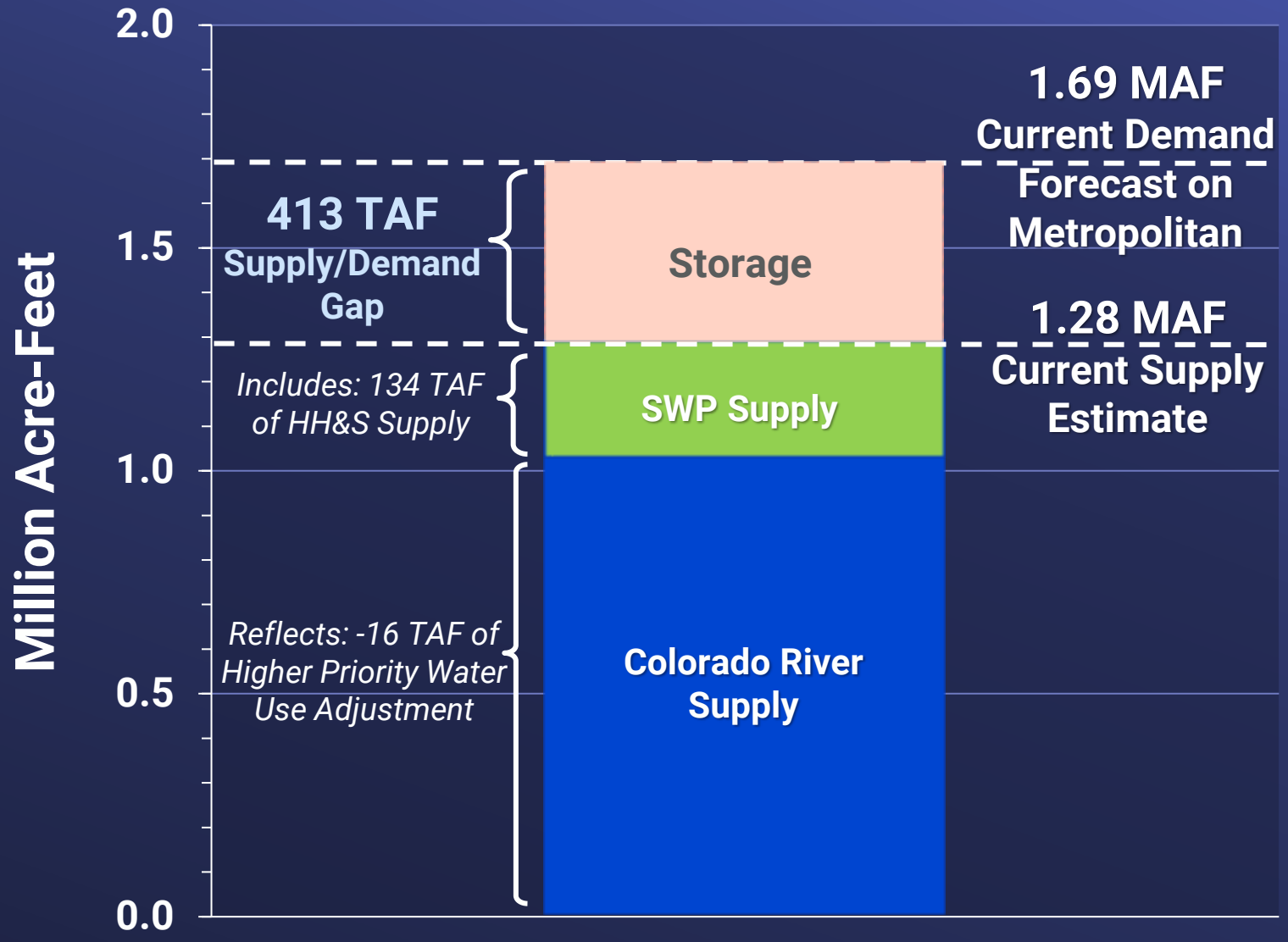
WSDM Supply Demand Balance

Regional View



WSDM Supply Demand Balance

Regional View



Additional Updates

Upper Feeder Shutdown

- Emergency shutdown began September 6th and concluded September 19th
  - Emergency repair to critical MWD infrastructure
- Approximately 12 TAF of SWP supplies used during shutdown
  - Affected member agencies were those who receive water from Weymouth
- DWR approved additional Human Health & Safety water request for shutdown

Additional Updates

2023 Human Health & Safety

- Human Health and Safety (HH&S) calculation per DWR guidelines:

Human Health and Safety (HH&S) Needs **—** Local Supply Available for HH&S **=** Unmet HH&S Need

2023 Population

55 gallons per person per day

2023 Local Supply Projections

SWP Supplies Requested from DWR

- 2023 HH&S developed in coordination with SWP Dependent Area agencies
- Metropolitan submitted the assessment for the SWP Dependent Area for October 1st deadline

Emergency Water Conservation Program Update

Emergency Water Conservation Program

September Update

- September Path Compliance

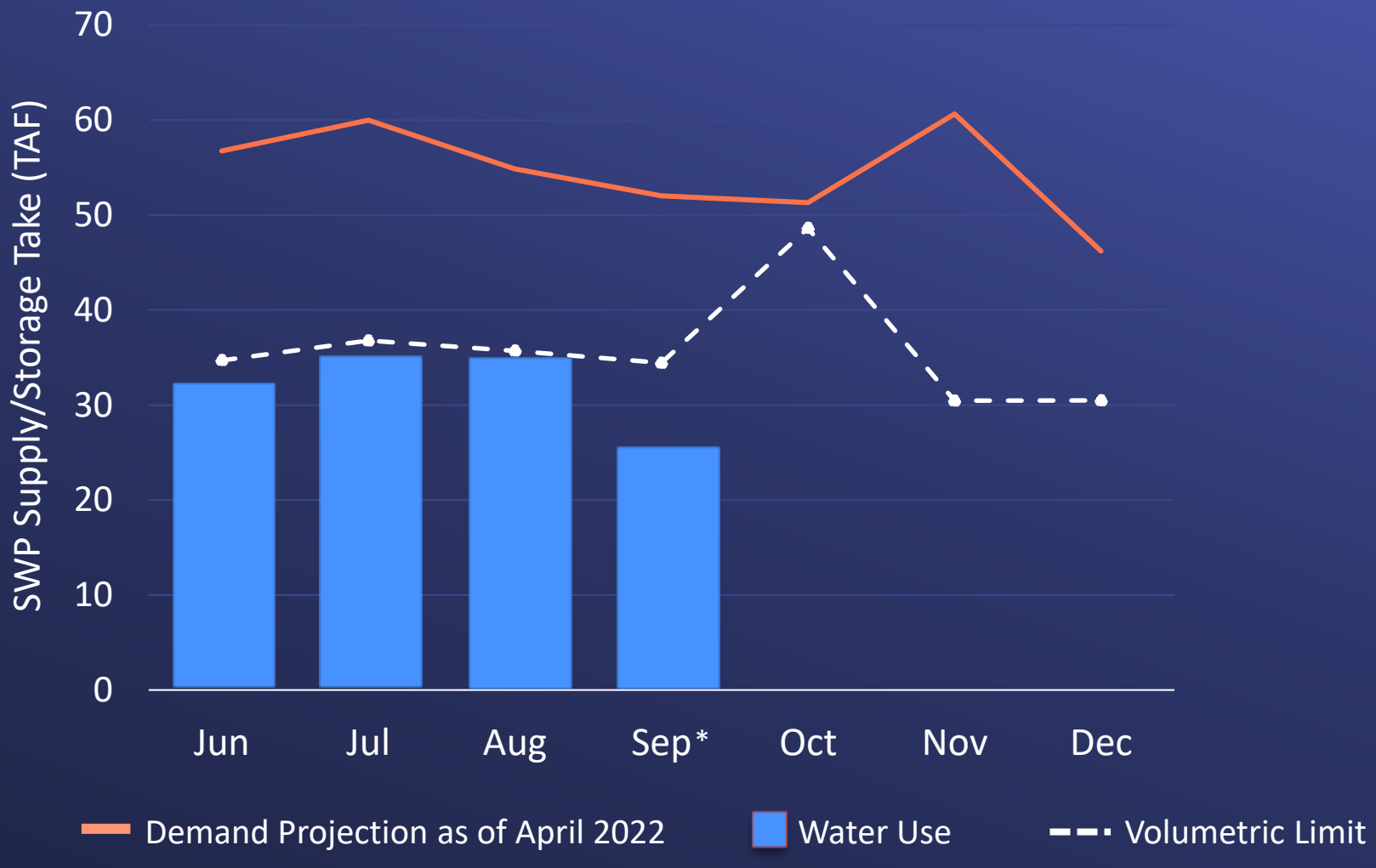
PATH 1	PATH 2
Las Virgenes MWD Three Valleys MWD Calleguas MWD*	City of Los Angeles Inland Empire Utilities Agency Upper San Gabriel Valley MWD

**6 of 19 Calleguas water purveyors are Path 2*

- No penalties issued for any Path 2 member agencies thus far
- Path l one-day-a-week watering continues through month of November

Emergency Water Conservation Program

SWP Dependent Area Demands on Metropolitan



**Note: Reduced demands in September stemmed from high turbidity in Castaic Lake and operational decisions by member agencies to reduce deliveries from Metropolitan*

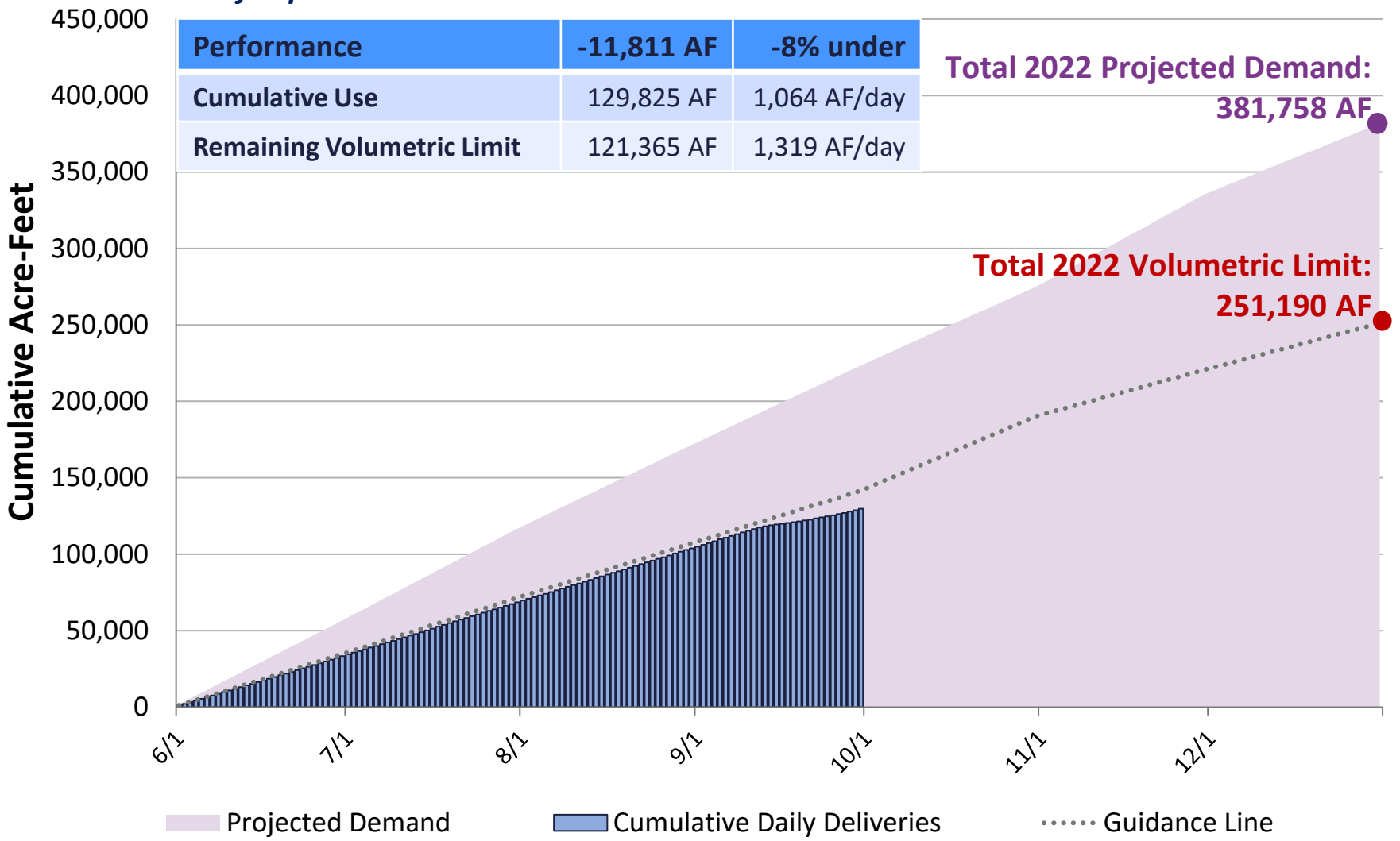
All SWP Dependent Agencies Weekly Water Use Tracking

June to December 2022

All SWP Dependent Agencies: June to December 2022

as of September 30

Performance	-11,811 AF	-8% under
Cumulative Use	129,825 AF	1,064 AF/day
Remaining Volumetric Limit	121,365 AF	1,319 AF/day



**Demand projection as of April 26, 2022*

Timeline of Activity and Key Decision Points

Weekly Tracking Update

(Water use will be tracked for all affected agencies against their volumetric limit regardless of path selection)

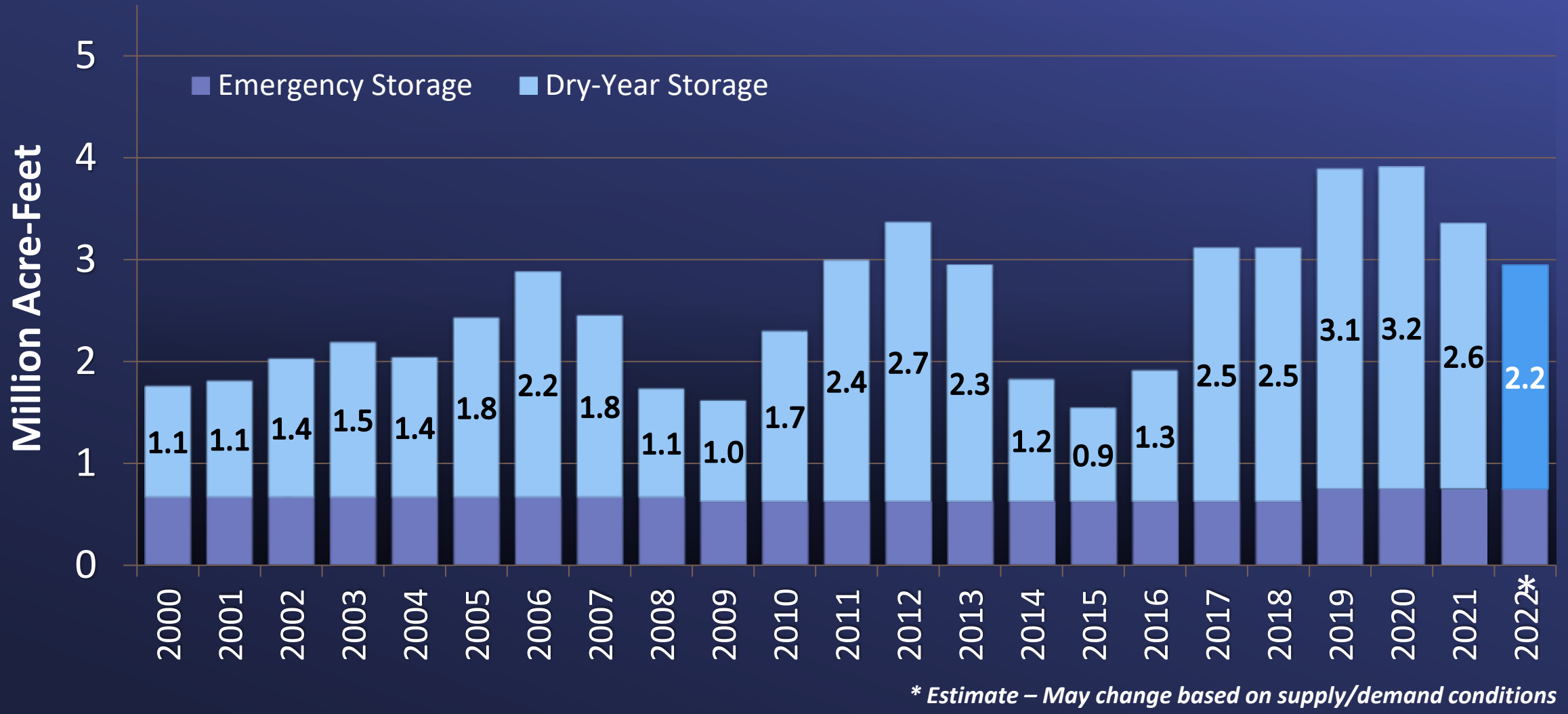
Commencement of Emergency Conservation Water Program

Begin zero-day outdoor watering (*if needed)*

Planning for Calendar Year 2023

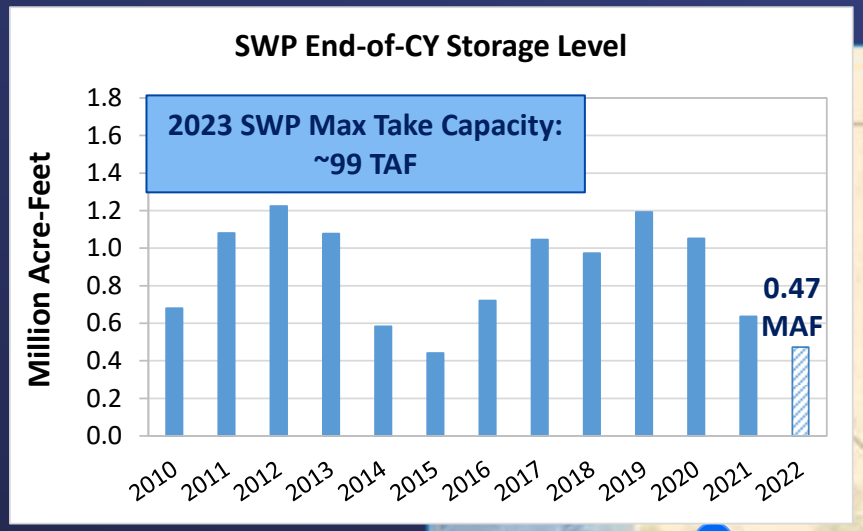
2022 Storage Projected to be 2.2 MAF

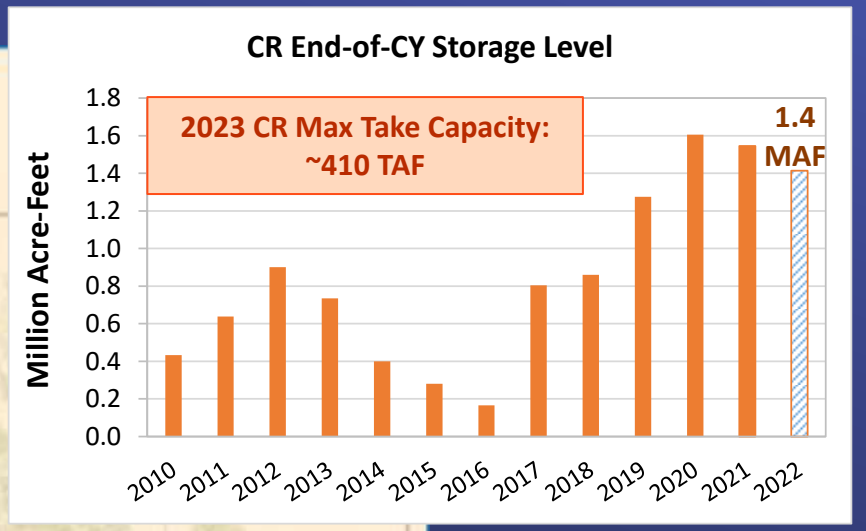
End of Year Balances

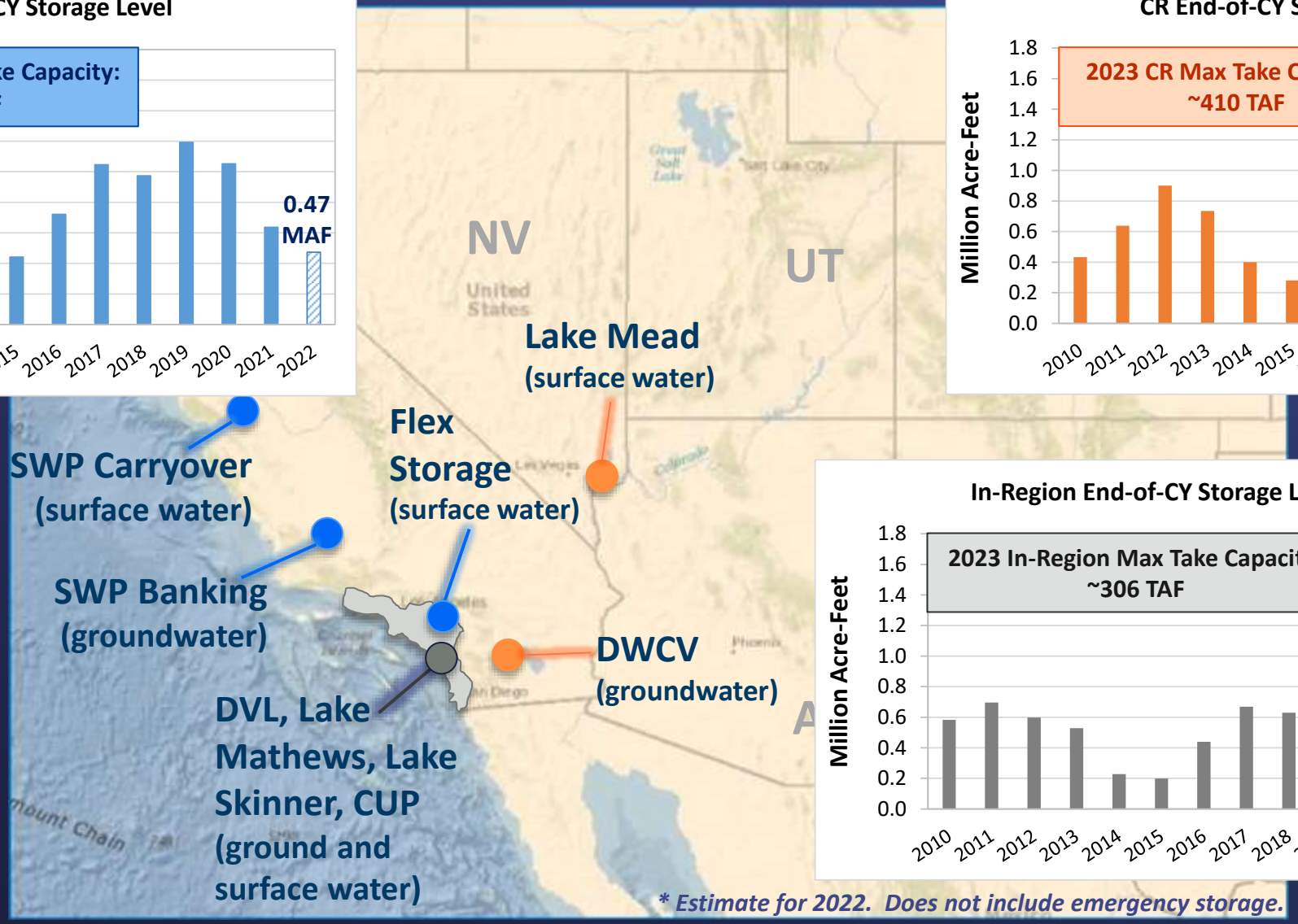


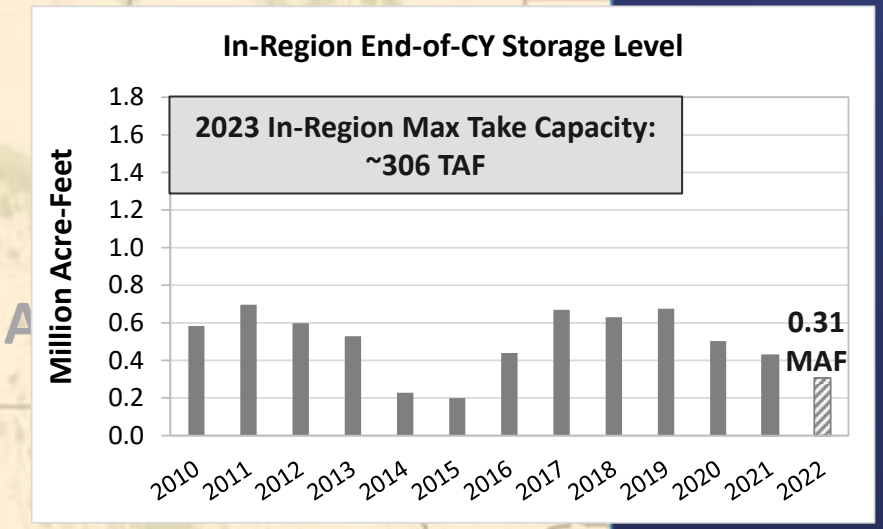
** Estimate – May change based on supply/demand conditions*

End of Year Storage by Region









** Estimate for 2022. Does not include emergency storage.*

Planning for 2023

Three Major Water Supply Problems Impacting 2023

1) Acute shortage of supplies to meet demands in SWP Dependent Area

- Very low initial SWP Table A allocation expected
- Depleted SWP system storage

2) Deteriorating Colorado River supply conditions and conservation mandates

- Level 2A Lower Basin shortage
- Lake Mead storage needed to satisfy future DCP contributions and obligations

3) Downward trend for in-region storage reserves

- Depleted MWD storage

Planning for 2023

All Three Problems Are Impacted by 2023 SWP Supplies

- Low 2023 SWP:
  - Extend the implementation of the EWCP
  - Continue to rely on Colorado River supplies as a baseload
  - Continue to drawdown regional storage
- High 2023 SWP:
  - Meet demands and recover storage in SWP Dependent Area
  - Reduce pressure and allow blending with Colorado River supplies
  - Stabilize and recover regional storage

Next Steps

- Continue to evaluate EWCP path compliance and potential penalties
- Continue transmittal of weekly EWCP reports
  - EWCP weekly report reflecting data from June 1 – October 11 tentatively scheduled for transmittal on October 12, 2022
- Ongoing coordination
  - Discussions with member agencies
    - 2023 EWCP parameters
    - Potential regionwide allocation approaches
  - Other system limitations impacts


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
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Imported Water Committee

Update on Lake Mead 500 Plus Plan

Item 6c

October 10, 2022

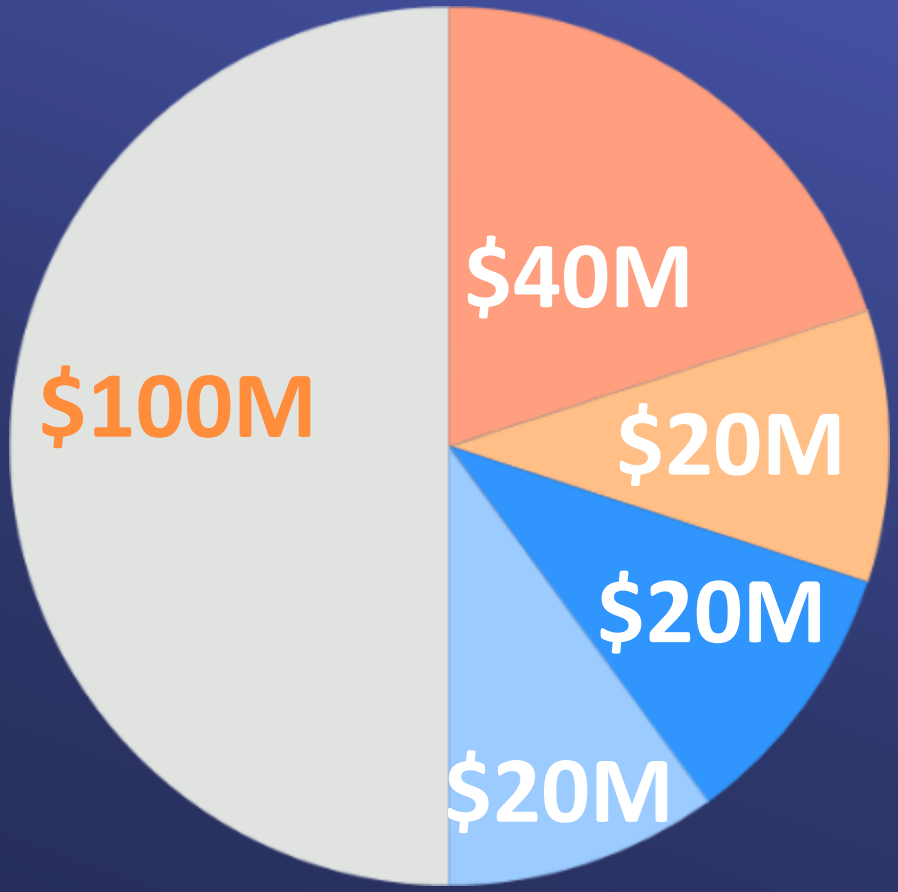
The 500+ Plan

Multiple Sources of 500+ Plan Contributions

Baseline is Reclamation's June 2021, 24-Month Study Most Probable Projection

- ✓ Additional Intentionally Created Surplus (ICS) Creation
- ✓ Reduction in Planned ICS Take
- ✓ New System Conservation
- ✓ New System Efficiency
- X 2007 Guideline Shortages
- X Drought Contingency Plan Contributions

$200 Million for 500+ Plan Conservation



United States Bureau of Reclamation

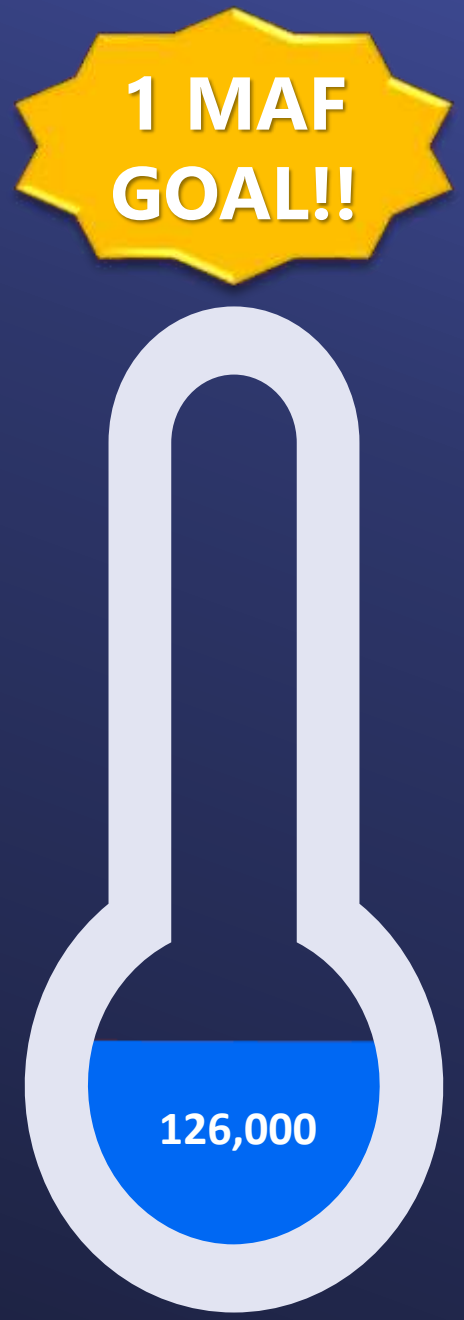
Arizona Department of Water Resources (ADWR)

Central Arizona Water Conservation District (CAWCD)

Southern Nevada Water Authority (SNWA)

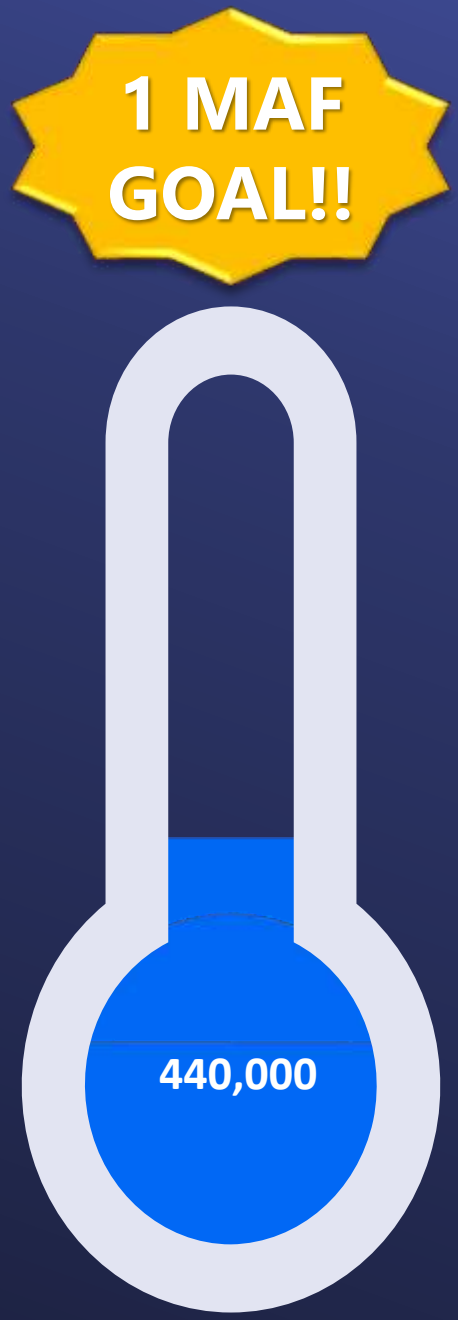
Metropolitan

2021 Conservation Activities Towards End of 2023 Goal



- CAWCD ICS Creation
- SNWA ICS Creation
- Reduction in Metropolitan ICS Take
- Gila River Indian Community (GRIC) System Conservation
- Palo Verde Irrigation District (PVID) System Conservation

2022 Conservation Activities Towards End of 2023 Goal



- Reduction in Intentionally Created Surplus Take
- Arizona System Conservation
  - Central Arizona Water Conservation District
  - Gila River Indian Community
  - Yuma Mesa Irrigation and Drainage District
  - Wellton Mohawk Irrigation and Drainage District
  - Mohave Valley Irrigation and Drainage District
- PVID System Conservation

Increased Conservation Needed due to Dry Hydrology

low elevations.

2023 – 2026 $4 Billion in Inflation Reduction Act Funding and Next Steps

Water Conservation Goal has Increased.

$4 Billion in Funding for Drought Relief.

New Programs are anticipated.

Dynamic and Evolving Situation.


THE METROPOLITAN WATER DISTRICT OF
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1928

• Colorado River Management Report

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month of September 2022.

Purpose

Informational

Detailed Report

Colorado River Symposium

Every few years, the Water Education Foundation hosts a symposium in Santa Fe that includes staff from key agencies working on the Colorado River. At this year's event, the Secretary of the Interior Deb Haaland, Assistant Secretary for Water and Science Tanya Trujillo, and Bureau of Reclamation Commissioner Camille Calimlim Touton spoke to the group regarding steps the Interior Department (Interior) is taking to prevent the Colorado River system's reservoirs from falling to critically low elevations that would threaten water deliveries and power production.

Interior emphasized the need for continued collaboration and partnerships across the Upper and Lower Basins, with tribes, and with the country of Mexico. Interior also described their preparation for administrative actions to ensure that the Colorado River System can sustainably deliver vital water supplies, power, and other services.

Department leaders outlined the framework under consideration for the funds as part of the Inflation Reduction Act, which includes $4 billion in funding specifically for water management and conservation efforts in the Colorado River Basin and other areas experiencing similar levels of drought. Metropolitan's General Manager Adel Hagekhalil also spoke about Metropolitan's participation in the urban water provider water conservation Memorandum of Understanding and the One Water approach and how these will be used to benefit the Colorado River system.

Interior described how it will establish, among other funding mechanisms, a two-step process to solicit short-term conservation contributions and longer-term durable system efficiency projects. Longer-term projects could include projects like as canal lining, re-regulating reservoirs, ornamental and non-functional turf removal, salinity projects, aquatic ecosystem restoration and impacts mitigation, crop water efficiency, rotational fallowing, and marginal land idling. The Bureau of Reclamation (Reclamation) held a listening session on September 30, 2022, to hear directly from states, tribes, water managers, farmers, irrigators and other stakeholders about implementation of this historic funding from the Inflation Reduction Act.

2023 Annual Operating Plan

Reclamation held the third consultation meeting regarding its Annual Operating Plan for Colorado River reservoirs (AOP) for 2023 on September 7, 2022. Each year Reclamation prepares an AOP that reports on operations of 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. The AOP provides Metropolitan with significant operational information regarding projected releases from Lake Powell to Lake Mead and whether the Lower Division States (California, Arizona and Nevada) will be at normal, surplus, or shortage conditions. For 2023, a first ever shortage level 2 will be in place, which affect Arizona and Nevada, but not California. However, due to the critical conditions on the Colorado River, Reclamation has stated it may take additional actions in 2023, if needed, to protect the basin's reservoirs. Metropolitan uses information in the AOP to plan diversions, Intentionally Created Surplus creation and/or delivery, interstate banking determinations, and Drought Contingency Plan Contributions.

Date of Report: 10/11/2022

Ordinarily, Reclamation holds three consultations before finalizing the AOP, but due to many changing issues under consideration with operation of federal facilities on the Colorado River this year Reclamation will hold a fourth consultation on Wednesday, October 12, 2022. Metropolitan staff participates in AOP consultations.

Pre-Scoping for Next Set of Guidelines

The 2007 Interim Guidelines expire on December 31, 2025. To help develop operating strategies for operation of Colorado River reservoirs post-2026, Reclamation published a Federal Register Notice on June 24, 2022 asking for public input in two specific areas:

- Suggested mechanisms for the anticipated NEPA process(es) to ensure that a wide range of Basin partners, stakeholders, and the general public can meaningfully engage and participate in the development of post-2026 operational strategies; and
- Potential substantive elements and strategies that should be considered for post-2026 operations and considered in the anticipated upcoming National Environmental Policy Act process.

The comment period ended September 1, 2022. Reclamation received 135 unique comment letters from concerned citizens, more than 1,964 submittals of the Blue Ribbon Coalition "Fill Lake Powell – the Path to 3588 ft" form letter, and 55 in-depth stakeholder letters signed by 81 unique stakeholders. Metropolitan submitted a comment letter that emphasized the importance of improving management and operations of the system under low storage and run-off conditions, allowing the opportunity for augmentation and exchange, and ensuring broad stakeholder participation in the development of the next set of guidelines.

- **Bay-Delta Management Report**

Summary

This report provides a summary of activities related to the Bay-Delta for September 2022.

Purpose

Informational

Detailed Report

Long-Term Delta Actions

Delta Conveyance

The California Department of Water Resources (DWR) released the public Draft Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) for the Delta Conveyance Project (DCP) on July 27, 2022. It describes project alternatives, potential environmental impacts and identifies mitigation measures to help avoid, minimize, or substantially lessen potentially significant impacts. In response to requests to extend the comment period, on September 23, DWR announced that the comment period has been extended from October 27th to Friday, December 16, 2022, giving agencies and the public 143 days to comment.

A Change Sheet for the DCP Draft EIR is now available on the Delta Conveyance Project website (Read the Document (deltaconveyanceproject.com). Since the publication of the Draft EIR, formatting and editing issues have been identified in the Draft EIR. The Change Sheet describes those issues and the changes that will be made in the Final EIR to correct them. In some cases, the issues identified were not easily presented in the Change Sheet, and corrected files have been posted on the DCP Draft EIR website to present the corrected information. None of the identified changes modify the Draft EIR impact analyses or conclusions. The Change Sheet may continue to be updated if other formatting or editing issues are identified throughout the duration of the comment period.

DWR conducted three virtual public hearings to receive comments on the DCP Draft EIR on September 13, from 9:00 a.m. to 11:00 a.m., September 22, from 12:00 p.m. to 2:00 p.m., and September 28, from 5:30 p.m. to 7:30 p.m.

The U.S. Army Corps of Engineers, as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, is preparing an Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act and is planning to release draft EIS for public review later this year.

Joint Powers Authorities

During the regularly scheduled Board of Directors Meeting on September 15, the Delta Conveyance Design and Construction Authority (DCA) Board of Directors approved a resolution to extend virtual board and committee meetings pursuant to AB 361. The DCA Board also passed a resolution approving the fourth amendment to the Management Partners Agreement for Executive Director services.

The Delta Conveyance Finance Authority (DCFA) Board of Directors held their regularly scheduled meeting on September 15, and they approved the Investment Policy and delegated authority to the DCFA Treasurer to invest DCFA funds.

Sites Reservoir

At the September 16 joint meeting of the Sites Project Authority Board, they approved the release of the draft Initial Study/Mitigated Negative Declaration pursuant to CEQA to initiate the public review process for activities related to the 2023-2024 Sites Reservoir Test Pits, Fault Studies and Quarry Studies Project.

Date of Report: 10/11/2022

Near-Term Delta Actions

Regulatory Activities

Staff continued to participate in the collaborative groups called for in the 2019 Biological Opinions (BiOp) 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 September, staff participated in meetings and provided input to develop: (1) longfin smelt conceptual model to guide research needs, (2) study plans to evaluate the effects of the North Delta Foodweb Subsidy action using Delta smelt cage studies, and (3) priority monitoring needed to estimate juvenile production of steelhead.

Delta Island Activities

Since 2016, Metropolitan, along with Reclamation Districts (RD) #756 – Bouldin Island; RD #2025 – Holland Tract; RD #2026 – Webb Tract; and RD #2028 – Bacon Island, has been working diligently on installation of up to 88 magnetic flow meters on the most widely used siphons to measure and report diversions consistent with SB 88 – Water Diversion Measurement Compliance. During this period, fourteen meters (~56 percent) have been installed as a part of Phase 4 (installation of 25 total meters).

Metropolitan also started building numerical correlations (case-by-case) between metered diversion to OpenET (evapotranspiration relationship to crop/plant consumptive use). This effort is to evaluate various diversion measurement devices with other data gathering methodologies, including OpenET to determine if they would meet SB 88 requirements.

Quarterly Bay-Delta Science Update

Metropolitan's Bay-Delta Science Program is directed at supporting strong science for protecting the Bay-Delta environment, driving better management decisions and supporting effective regulations. The following summary of Bay-Delta Science activities provides key highlights for the period July 1 to September 30, 2022.

Staff will continue to provide this report on a quarterly basis in the Bay Delta Management Report to support reporting on the related portion of the General Manager's Priorities.

Bay-Delta Science Update, July-September 2022

Science Objective	Accomplishments
Collaborative Science	Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP) with state and federal agencies, water agencies and the NGO environmental community. Key progress this quarter focused on efforts to facilitate recovery planning for Delta smelt and salmon. • Salmon Recovery Initiative – Staff efforts focused on Phase 2 of the project to develop a baseline scenario of current and planned projects in the Bay-Delta watershed aimed at increasing salmon abundance. This information will be used to evaluate management actions to achieve salmon recovery. • Delta Smelt Structured Decision Making – Staff efforts focused on review and discussion of initial modeling results for the project, including evaluating the effects of potential Delta smelt management actions being considered. The State Water Contractors (SWC) held a Science Symposium on September 13, addressing the science related to the water project operations management criteria consisting of the ratio of San Joaquin River inflow to water project exports. This measure has been a key focus in recent processes related to water project operations requirements. Staff helped organize and facilitate the symposium, which included background information on the regulation and recent science on how the regulation impacts hydrodynamics and juvenile salmon survival in the South Delta.

Science Objective	Accomplishments
Science Investigations	Staff continued to collaborate with university researchers, science experts and state and federal agencies to carry out science studies. Staff co-authored two scientific publications in peer-reviewed journals reporting on recent studies. Staff co-authored a scientific paper in *Estuaries and Coasts* journal reporting on findings from a symposium on practical applications of methods for detecting environmental DNA (eDNA) in the San Francisco Estuary to complement traditional monitoring and inform species management decisions in aquatic environments. Results from a Metropolitan eDNA study are included. Staff also co-authored a scientific paper in the *San Francisco Estuary and Watershed Science* journal, reporting on the outcomes of a workshop for managers, scientists' and stakeholders to develop a juvenile production estimate (JPE) for spring-run Chinook salmon. The development of a JPE will support spring-run management actions.
Innovation	The Delta Smelt and Native Species Preservation Project will utilize Delta island properties currently owned by Metropolitan to evaluate opportunities to support Delta smelt supplementation efforts. Staff continued to work with scientists from the U.S. Geological Survey and UC Davis to monitor the impoundments on the Delta islands to determine their suitability for Delta smelt rearing and supplementation research, and to prepare for Delta smelt enclosure studies this fall.
Delta Science Community	Staff attended the annual conference of the Society of Environmental Toxicology and Chemistry, Northern California Chapter, on September 15. The conference program included a presentation on a study funded by Metropolitan, Delta Science Program, Department of Pesticide Regulation, DWR, and SWC to evaluate the relative risk of toxic contaminants in the Delta and potential effects on Delta fish species.