



**Bay-Delta Committee**

L. Ackerman, Chair  
S. Faessel, Vice Chair  
R. Apodaca  
R. Atwater  
S. Blois  
G. Cordero  
M. Hogan  
C. Kurtz  
R. Lefevre  
T. McCoy  
J. Morris  
J. Murray Jr.  
G. Peterson  
B. Pressman  
H. Repenning

**Bay-Delta Committee**

Meeting with Board of Directors \*

**October 26, 2021**

**10:30 a.m.**

**Tuesday, October 26, 2021  
Meeting Schedule**

09:00 a.m. - C&LR  
10:30 a.m. - Bay-Delta  
11:30 a.m. - Break  
12:00 p.m. - Exec  
12:30 p.m. - A&E

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

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

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

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

**\*\* CONSENT CALENDAR OTHER ITEMS -- ACTION \*\***

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

- A. Approval of the Minutes of the Meeting of the Bay-Delta Committee held September 28, 2021 [21-585](#)

**Attachments:** [10262021 Bay-Delta 2A Draft Minutes](#)

**3. CONSENT CALENDAR ITEMS - ACTION**

None

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

**4. OTHER BOARD ITEMS - ACTION**

None

**5. BOARD INFORMATION ITEMS**

None

**6. COMMITTEE ITEMS**

- a. Update on Delta Stewardship Council Activities

[21-579](#)

**Attachments:** [10262021 Bay-Delta 6a Presentation.pdf](#)

- b. Update on Sites Reservoir

[21-580](#)

**Attachments:** [10262021 Bay-Delta 6b Presentation.pdf](#)

**7. MANAGEMENT REPORTS**

- a. Bay-Delta Manager's Report

[21-581](#)

**Attachments:** [10262021 Bay-Delta 7a Report](#)

**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**

**BAY-DELTA COMMITTEE**

**September 28, 2021**

Committee Chair Ackerman called the teleconference meeting to order at 10:30 a.m.

Members present: Chair Ackerman, Vice Chair Faessel, Directors Apodaca, Atwater, Blois, Cordero, Hogan, Kurtz, Lefevre, McCoy, Murray, Jr., Morris, Peterson, and Pressman.

Members absent: Director Repenning.

Other Board Members present: Directors Abdo, Butkiewicz, De Jesus, Dick, Erdman, Goldberg, Hawkins, Quinn, Ramos, Record, Smith, and Tamaribuchi.

Committee Staff present: Arakawa, Hagekheilil, Horton, Upadhyay, Winn, and Zinke.

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

None

**CONSENT CALENDAR OTHER ITEMS – ACTION**

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

A. Approval of the Minutes of the Meeting of the Bay-Delta Committee held on July 27, 2021

**3. CONSENT CALENDAR ITEMS – ACTION**

None

Director Morris made a motion, seconded by Director Peterson to approve the consent calendar consisting of item 2A:

The vote was:

Ayes: Directors Ackerman, Apodaca, Atwater, Blois, Cordero, Faessel, Hogan, Kurtz, Lefevre, McCoy, Morris, Murray Jr., Peterson, and Pressman.

Noes: None

Abstentions: None

Absent: Director Repenning

The motion passed by a vote of 14 ayes, 0 noes, 0 abstentions, 1 absent.

**END OF CONSENT CALENDAR ITEMS**

**4. OTHER BOARD ITEMS – ACTION**

None

**5. BOARD INFORMATION ITEMS**

None

**6. COMMITTEE ITEMS**

- a. Subject: Update on Salmon Initiatives  
Presented by: Alison Collins, Bay-Delta Initiatives Senior Resource Specialist  
Steve Arakawa, Bay-Delta Initiatives Manager introduced the speaker.  
Ms. Collins provided information on salmonids including: how their status affects water supply reliability, the need for a long-term approach to rebuilding the salmonid population, science investigation priorities, and a description of one of the collaborative projects.  
The following Directors provided comments or asked questions.
  - 1. Peterson
  - 2. Committee Chair Ackerman
  - 3. Record

Staff responded to the Directors questions.

- b. Subject: Update on Delta Conveyance

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

Ms. Hawk provided updates on the Department of Water Resources' planning activities including the last three informational webinars and the Community Benefits Workshop which took place the previous day. She also reported on September's Delta Conveyance Design and Construction Authority and Stakeholder Engagement Committee meetings, and the August Delta Conveyance Finance Authority meeting.

The following Directors provided comments or asked a question.

1. Committee Chair Ackerman
2. Lefevre

Staff responded to the Director's question.

## **7. MANAGEMENT REPORTS**

- a. Subject: Bay-Delta Management Report

Presented by: Steve Arakawa, Bay-Delta Initiatives Manager

Mr. Arakawa informed the committee of an upcoming committee item, and reported on drought conditions in the Delta watershed and drought management planning by the state.

The following Director asked a question:

1. Peterson

Staff responded to the Director's question.

## **8. FOLLOW-UP ITEMS**

None

## **9. FUTURE AGENDA ITEMS**

None

Next meeting will be held on October 26, 2021.

Meeting adjourned at 11:26 a.m.

Linda Ackerman  
Chair



# Update on Delta Stewardship Council Activities

Bay-Delta Committee  
Item 6a  
October 26, 2021

# Overview

- Background
  - Delta Reform Act
  - Delta Stewardship Council Organizational Structure
- Collaboration Highlights
- Update on Key Activities
  - Delta Plan Amendments
  - Delta Plan Certification of Consistency
  - Delta Adapts: Creating a Climate Resilient Future



# The Delta Reform Act of 2009

- Established the Delta Stewardship Council as an independent state agency
- Developing and implementing an overarching plan for the Delta
  - Furthers the coequal goals for the Delta
  - Guides State and local agency actions related to the Delta



More reliable water supply  
for California



Protecting, restoring, and enhancing the  
Delta ecosystem



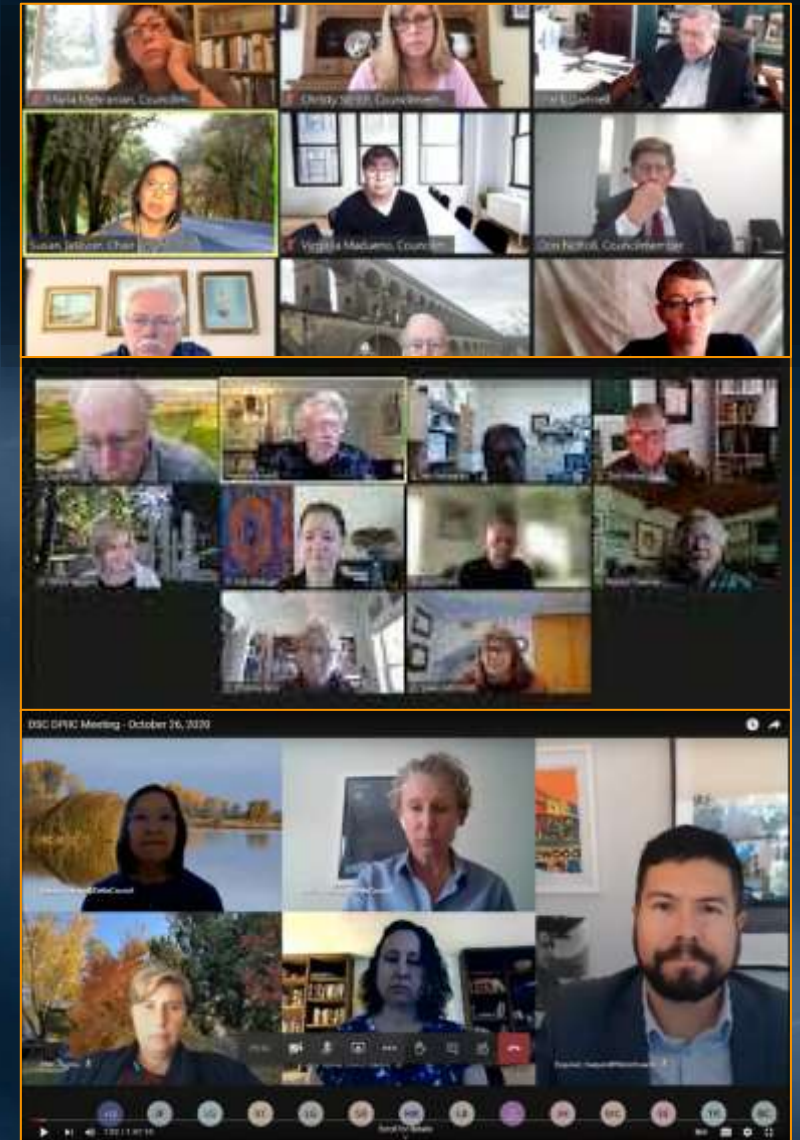
# Delta Stewardship Council Members



- Susan Tatayon, Chair (Rocklin)
- Frank C. Damrell, Jr. (Sacramento)
- Maria Mehranian (La Cañada Flintridge)
- Virginia Madueño (Riverbank)
- Don Nottoli (Galt)
- Christy Smith (Santa Clarita Valley)
- Daniel Zingale (Sacramento)

# Delta Stewardship Council Organization

- Legal Office
- Independent Science Board
- Executive Team
  - Legislative and Policy
  - External Affairs and Communications
  - Science
  - Planning and Performance
  - Administrative
  - Delta Plan Interagency Implementation Committee





# Collaboration Highlights

- Delta Stewardship Council Meetings
- Delta Plan Interagency Implementation Committee Meetings
- Independent Science Board
  - Science Needs Assessment Planning Team
  - Review of Water Supply Reliability Estimation
- Planning and Performance
  - Delta Plan Amendments
  - Delta Conveyance Certification of Consistency
  - Delta Adapts: Creating a Climate Resilient Future



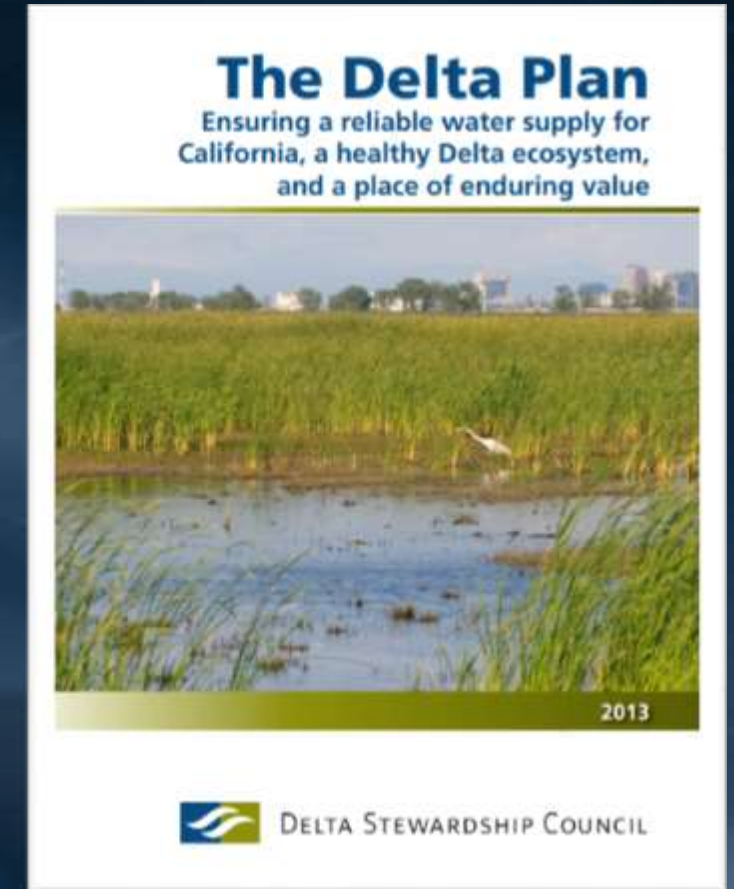
# Collaboration Highlights

- Delta Science Program
  - Collaborative Science and Adaptive Management Program
  - Interagency Ecological Program
  - Biennial Bay-Delta Science Conference
  - Delta Science Program Advisory Teams
  - Reorienting to Recovery – Salmonid Recovery Initiative
  - Bayesian Network Relative Risk Model for the Upper SF Estuary



# Delta Plan Amendments

- The Delta Plan was adopted in 2013
- Policies and recommendations address
  - Science & Adaptive Management
  - Governance
  - Water Supply Reliability
  - Delta Ecosystems
  - Water Quality
  - Delta Risk Reduction
  - Unique Delta Values/Culture
  - Funding Principles to Support Coequal Goals
- Policies and recommendations reviewed every 5 years and amended as appropriate





# Delta Plan Amendments

- 2016
  - Refined Performance Measures
  - Single-Year Water Transfers Exemption
- 2018
  - Delta Levees Investment Strategy
  - Conveyance, Storage and Operations
  - Refined Performance Measures
- In Progress
  - Protect, Restore, and Enhance the Delta Ecosystem
  - Delta Levees Investment Strategy

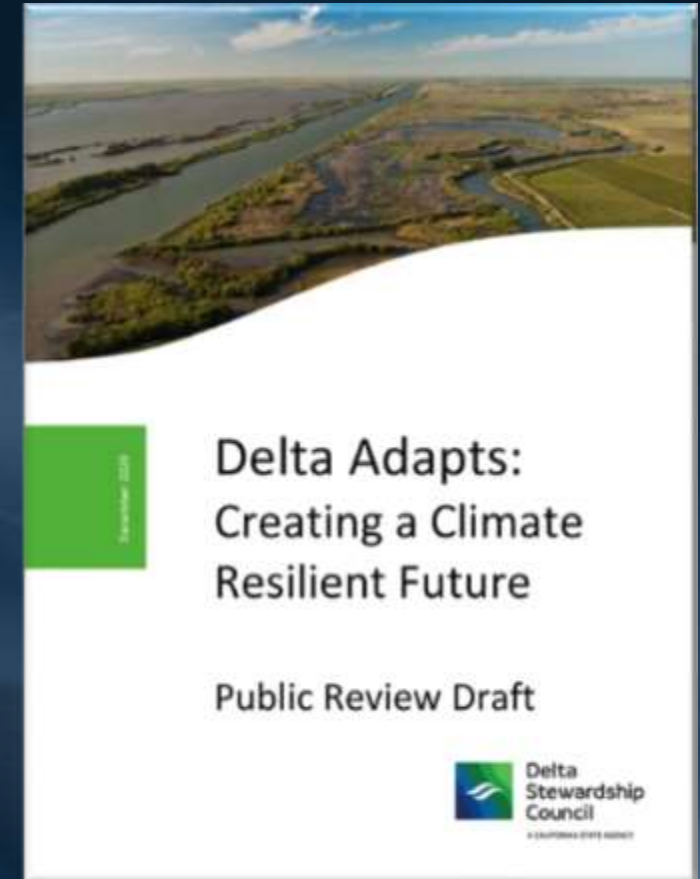


# Delta Plan Certification of Consistency

- State or local agencies proposing certain actions in the Delta must certify consistency with Delta Plan policies
  - Ecosystem restoration projects
  - Some cross-Delta transfers
  - Delta conveyance
- Ongoing commitment to resolve technical, policy and legal issues
  - Staff collaborating in Delta Conveyance Project early consultation with DWR and DSC staff
  - SWC agencies working together to engage Council members and executive management on SWP issues

# Delta Adapts: Creating a Climate Resilient Future

- Vulnerability Assessment
  - Evaluated impacts of climate change on Delta environment, communities, assets, and resources through 2100
- Staff provided input throughout the development process
  - Stakeholder workgroup
  - Review drafts with State Water Contractors
- Final Vulnerability Assessment adopted June 2021





# Delta Adapts: Creating a Climate Resilient Future

- Adaptation Strategy
  - Will identify a range of policy and management actions that improve resilience to climate change
  - Builds on findings of the Vulnerability Assessment
- DSC staff is currently engaged in internal planning
  - Policy scoping
  - Workplan development
  - Outreach approach
- Focus group meetings begin soon and continuing into early next year

# Next Steps

- Delta Plan ecosystem amendments comments submitted in coordination with SWC by November 30
- Participation in Delta Adapts focus groups this winter
- Continued engagement in ongoing science and policy efforts









# Update on Sites Reservoir Project Planning

Bay Delta Committee

Item 6b

October 26, 2021

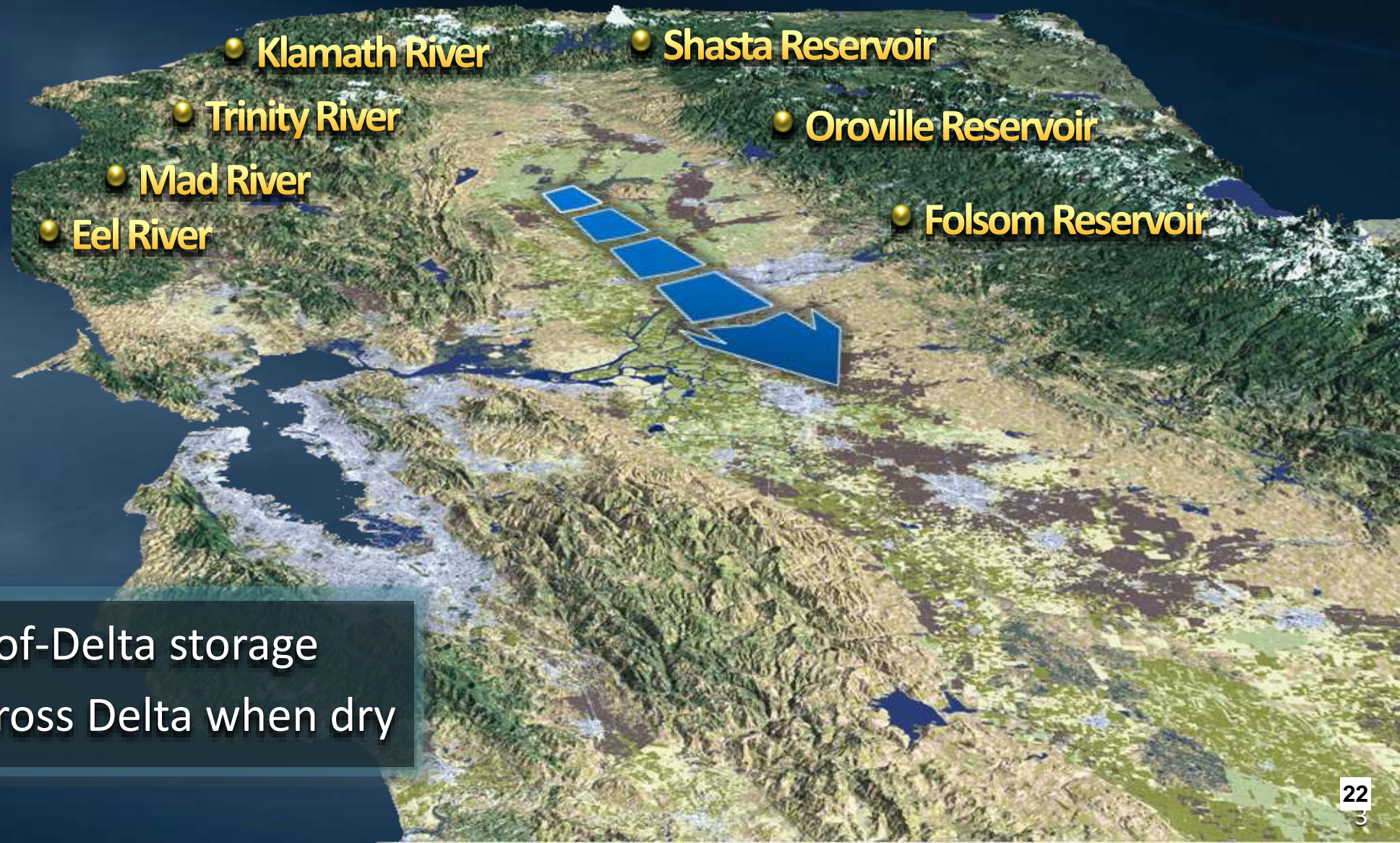


# Topics

- California's Reservoir System  
Original Vision & Changing Priorities
- Storage Investigations  
Statewide Analyses
- Sites Reservoir Planning  
Key Progress & 2022-2024 Workplan
- Board Review & Consideration  
Previous & Upcoming Decisions
- Summary & Next Steps



# The Original Vision 1950s



- Large North-of-Delta storage
- Deliveries across Delta when dry



# Environmental Priorities 1970s



- Wild & Scenic Rivers Act (Fed & State)
- SWP plan loses key North Coast storage



# Integrated Operations 1990s

- Integrate surface reservoir and groundwater recharge operations
- Develop groundwater banking and off-stream storage





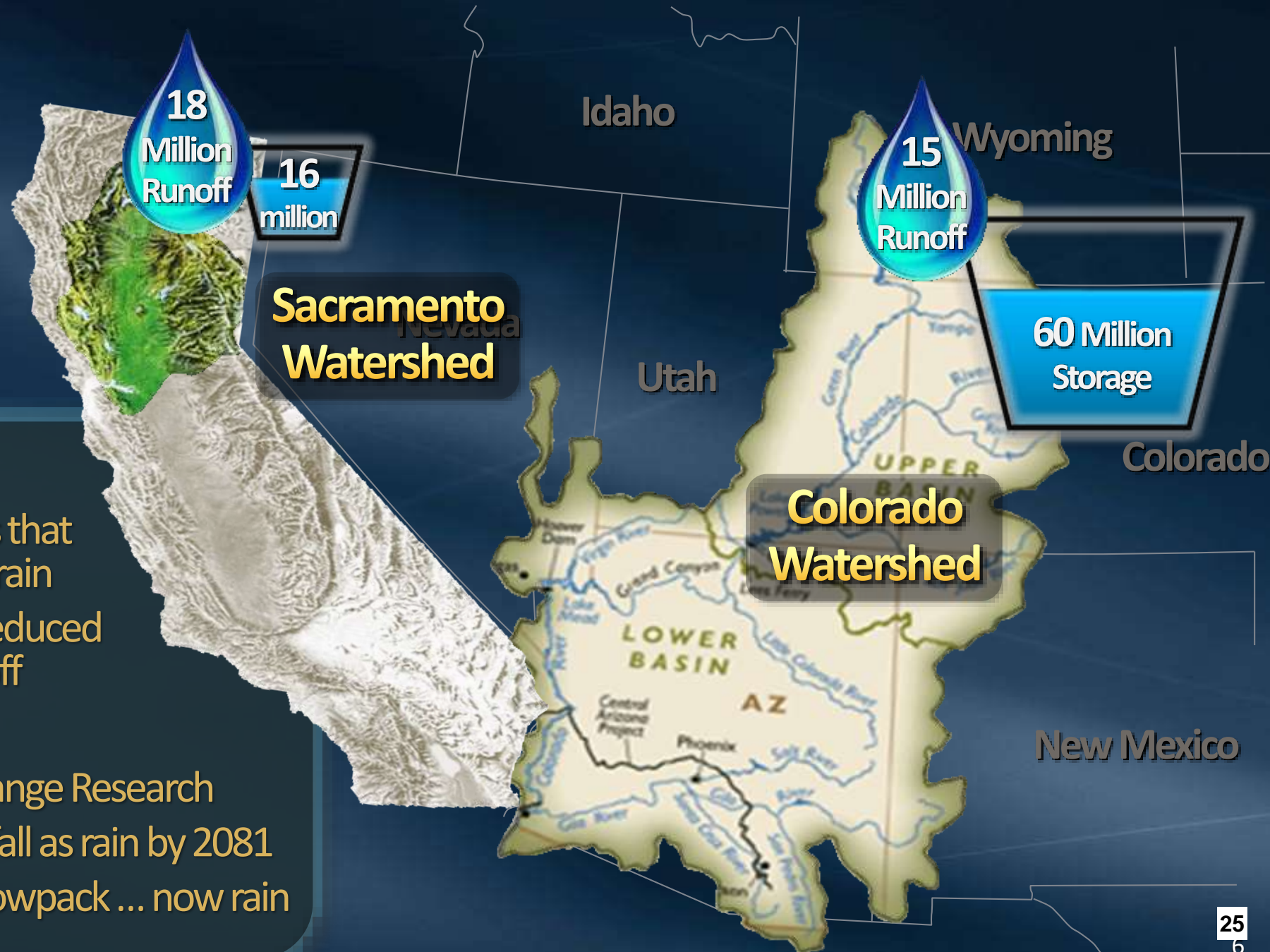
# Climate Resiliency 2010s

## The Challenge

- How to mitigate the impacts that snow will increasingly fall as rain
- Increased winter flooding, reduced critical Spring/Summer runoff

## Climate Research

- UCLA Center for Climate Change Research
- 30 to 64% of snowpack will fall as rain by 2081
- 4 to 9 million AF of Sierra snowpack ... now rain



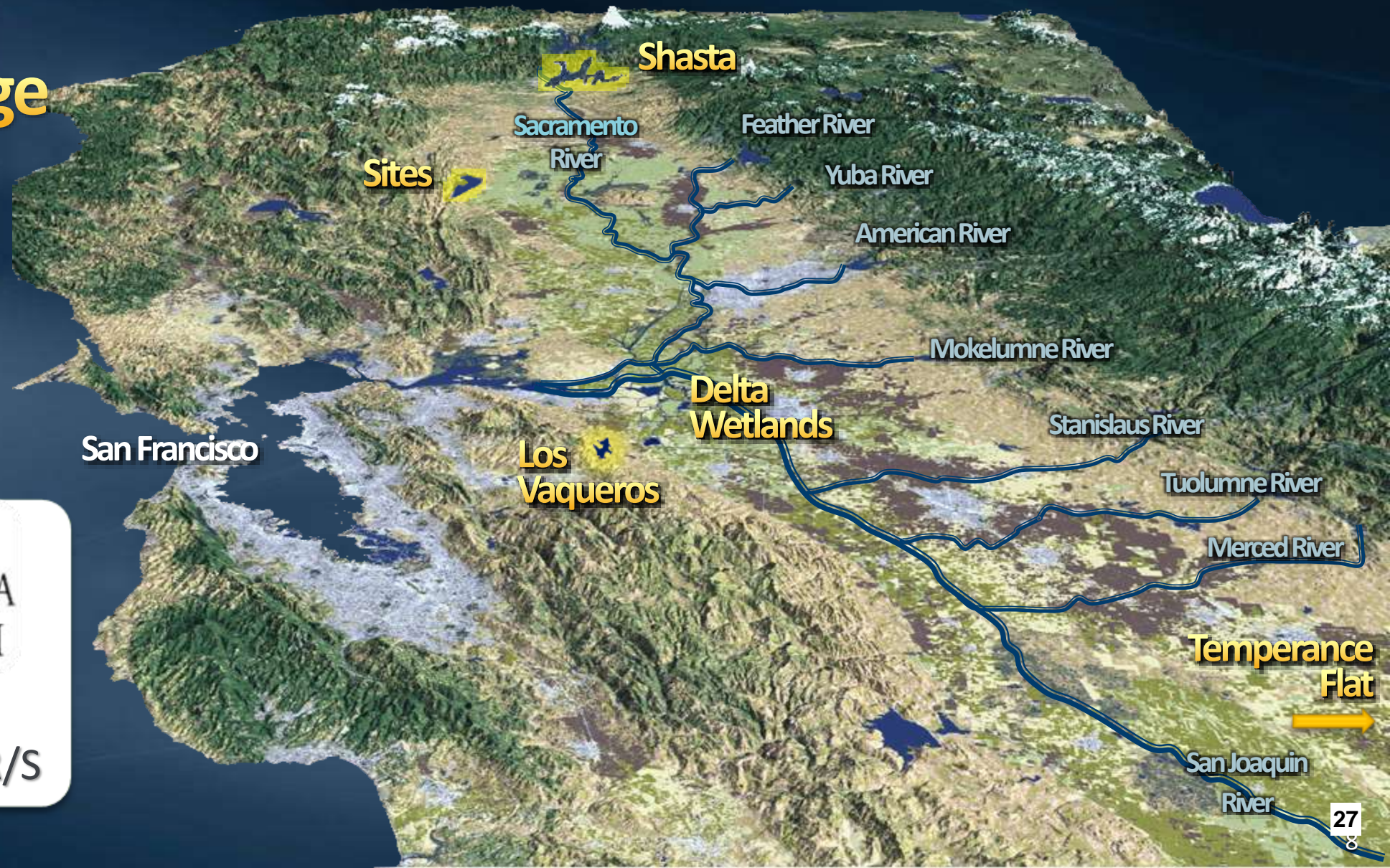


# Topics

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# CALFED Surface Storage Screening 2000



CALFED  
BAY-DELTA  
PROGRAM

- 52 sites analyzed
- 5 sites in final EIR/S



# California Proposition 1 Water Storage Investment Program 2014

- 11 agency projects
  - 6 surface water projects
  - 5 groundwater projects
- 7 Northern California
- 4 Southern California
- \$2.7 billion Prop 1 fund

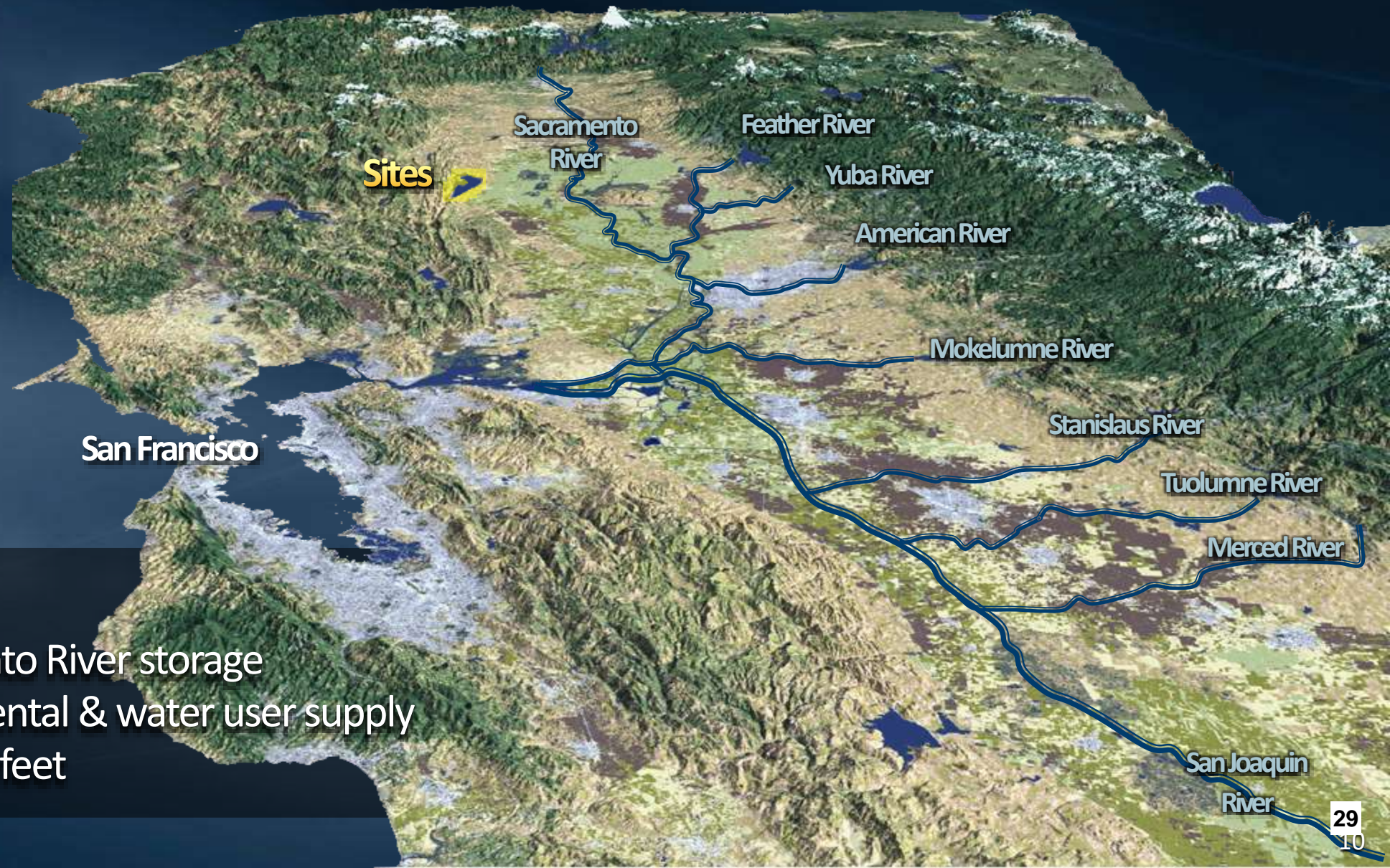


- |   |           |
|---|-----------|
| <b>Sites Project</b><br>Off-stream reservoir   Sac River      | <b>1</b>  |
| <b>Centennial Project</b><br>New reservoir   Bear River       | <b>2</b>  |
| <b>South Sacramento</b><br>Treated wastewater conjunctive use | <b>3</b>  |
| <b>Los Vaqueros</b><br>Off-stream reservoir enlargement       | <b>4</b>  |
| <b>Pacheco</b><br>Reservoir expansion                         | <b>5</b>  |
| <b>Temperance Flat</b><br>New reservoir   San Joaquin River   | <b>6</b>  |
| <b>Tulare Lake</b><br>Kings River water bank                  | <b>7</b>  |
| <b>Kern Fan</b><br>Groundwater bank                           | <b>8</b>  |
| <b>Willow Springs</b><br>Groundwater bank                     | <b>9</b>  |
| <b>Chino Basin</b><br>Bank treated wastewater                 | <b>10</b> |
| <b>San Diego</b><br>Treat & store wastewater                  | <b>11</b> |



# Sites Reservoir

## Overview



### Proposed

- Off-stream Sacramento River storage
- Dedicated environmental & water user supply
- 1.3 – 1.5 million acre-feet



# Sites Reservoir

## Overview




- Large un-controlled runoff area below rim dams
- Can produce significant flood & surplus outflows



**Largely undeveloped, agricultural grazing land**



A wide-angle photograph of a large, straight irrigation canal filled with water. The water's surface is calm, reflecting the bright blue sky and the silhouettes of several high-voltage power line towers in the distance. The canal is flanked by dark, gravelly embankments. In the background, rolling hills are visible under a clear sky. The overall scene suggests a large-scale agricultural or water management project.

**Takes advantage of existing facilities, including the  
Tehama-Colusa & Glen-Colusa Irrigation District canals**





# Topics

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# Key Progress

## ✓ Technical Analyses

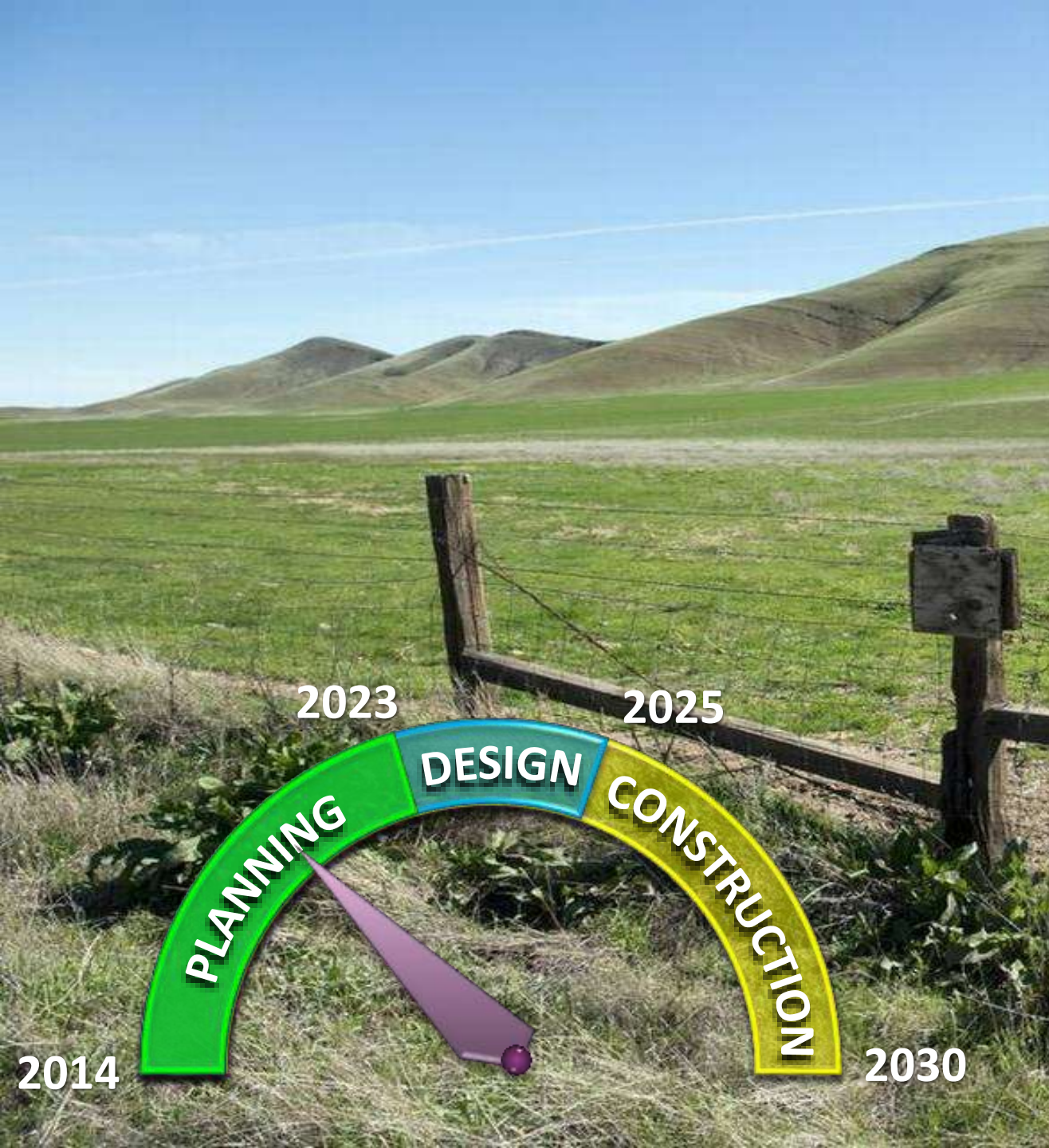
- Initial water supply modeling & operations
- Initial engineering design & cost estimates
- Value Planning project improvements

## ✓ Regulatory/Environmental

- Revised Draft Environmental Impact Report/Statement
- Regulatory agency consultation & initial permit application development

## ✓ State/Federal Funding

- \$836 million State Proposition 1 grant
- \$24 million federal WIIN Act grant
- \$449 million US Dept. of Agriculture loan





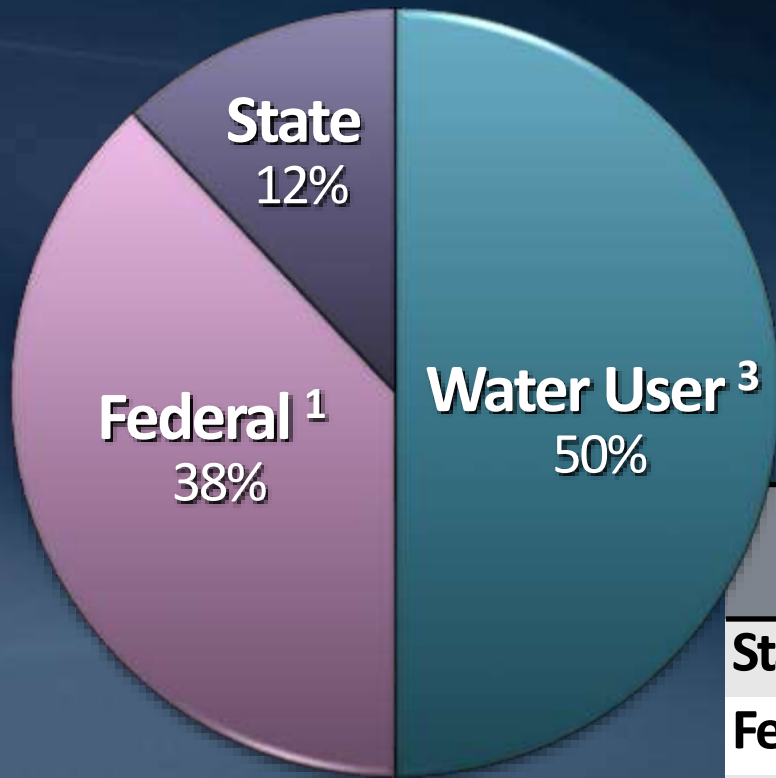


# 2022-24 Workplan

## Focus & Key Deliverables

- Environmental
  - Final EIR/EIS & Record of Decision
- Permits/Agreements
  - Water rights permit
  - Environmental permits
  - Local agency agreements
- Project Operations
  - Final coordinated operations agreement with DWR/USBR
- Engineering
  - Advance 30% design & geotechnical investigations
- Develop mitigation & land acquisition master plan

Reservoir overlook – Governor Brown (2018)



## 2022-24 Workplan 3-Year Budget<sup>1</sup>

Source	2022	2023	2024	Total
State (Prop 1 Grant)	\$ 18,300,000	--	--	\$ 18,300,000
Federal (WIIN Act) <sup>2</sup>	\$ 10,000,000	\$ 20,000,000	\$ 20,000,000	\$ 50,000,000
Water Users <sup>3</sup>	\$ 17,267,000	\$ 23,972,000	\$ 27,324,000	\$ 68,563,000
Carryover Funds	\$ 6,000,000			\$ 6,000,000
<b>TOTAL<sup>3</sup></b>	<b>\$ 51,567,000</b>	<b>\$ 43,972,000</b>	<b>\$ 47,324,000</b>	<b>\$ 142,863,000</b>
<b>MWD Share <sup>4</sup></b>	<b>\$ 5,000,000</b>	<b>\$ 7,000,000</b>	<b>\$ 8,000,000</b>	<b>\$20,000,000</b>

1. 2022-24 Workplan, also referred to as the Amendment 3 Workplan, is for the period of Jan. 1, 2022, through Dec. 31, 2024.

2. Subject to federal appropriation

3. Subject to individual participating agency Board approval

4. Assumes participation by Metropolitan based a 311,700 acre-ft of storage (also defined as an average yield of 50,000 AF/year)



# Broad Statewide Involvement

## ● Bay Area

- Santa Clara Valley WD
- Zone 7 Water Agency

## ● San Joaquin Valley

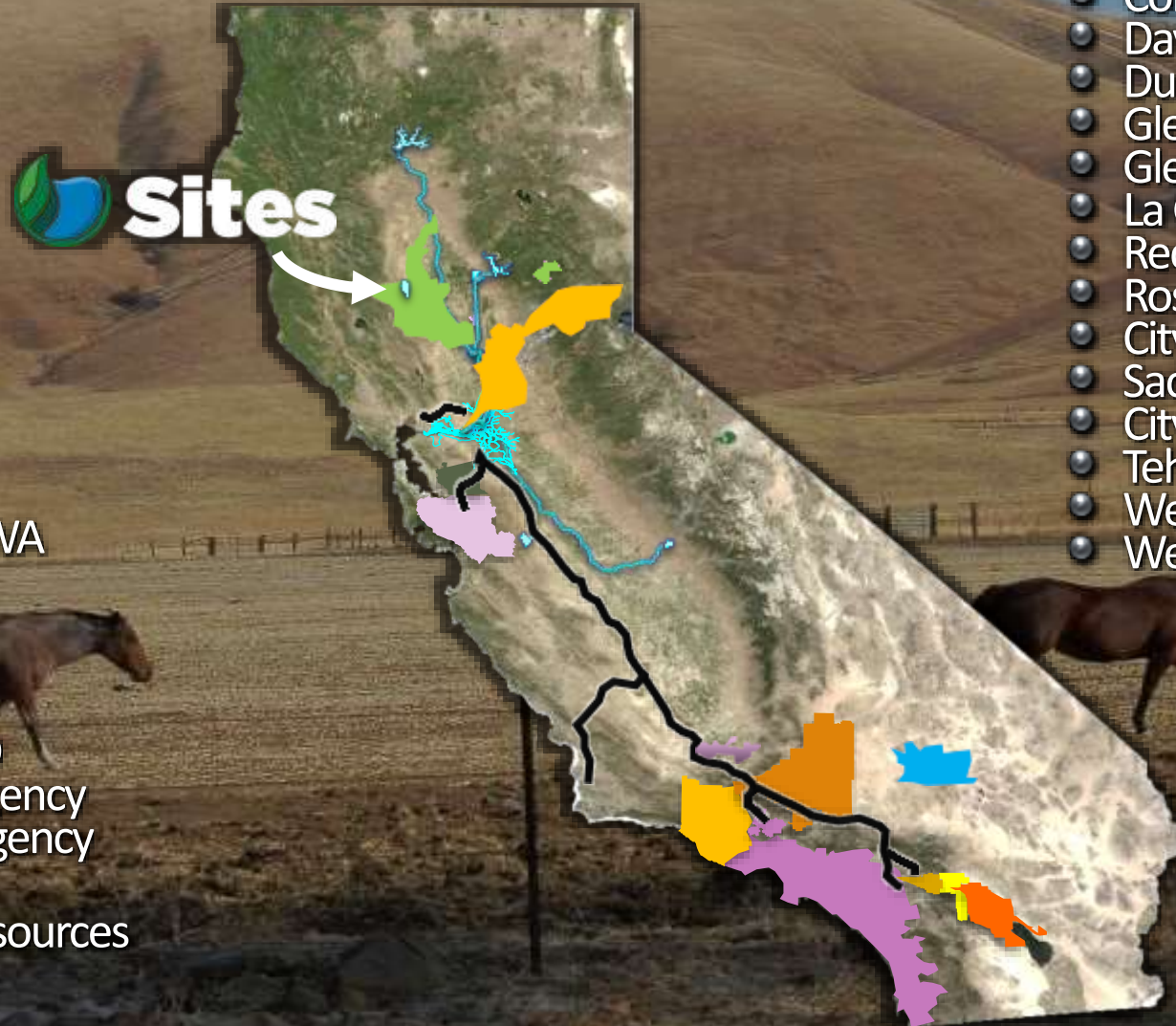
- Wheeler Ridge - Maricopa

## ● Southern California

- Antelope Valley - East Kern WA
- Coachella Valley WD
- Desert Water Agency
- Irvine Ranch Water District
- Metropolitan Water District
- San Bernardino Valley MWD
- San Geronio Pass Water Agency
- Santa Clarita Valley Water Agency

## ● State/Federal

- California Dept. of Water Resources
- U.S. Bureau of Reclamation



## ● Sacramento Valley

- Carter Municipal Water Co.
- City of American Canyon
- Colusa County
- Colusa County Water District
- Cortina Water District
- Davis Water District
- Dunnigan Water District
- Glenn County
- Glenn-Colusa Irrigation District
- La Grande Water District
- Reclamation District 108
- Rosedale-Rio Bravo WSD
- City of Roseville
- Sacramento County WA
- City of Sacramento
- Tehama Colusa Canal Authority
- Westside Water District
- Western Canal Water District



# Sites Reservoir

Project Storage (1.5 million AF)

Metropolitan Share

● Storage – 311,700 AF (22.6%)



**North-of-Delta  
Participants**  
~ 257,000 AF (18%)

**South-of-Delta  
Participants**  
~ 788,000 AF (57%)

**Bureau of  
Reclamation**  
~ 91,000 AF (7%)

**State of  
California**  
~ 244,000 AF (18%)

**Deadpool (non active)** ~ 120,000 AF

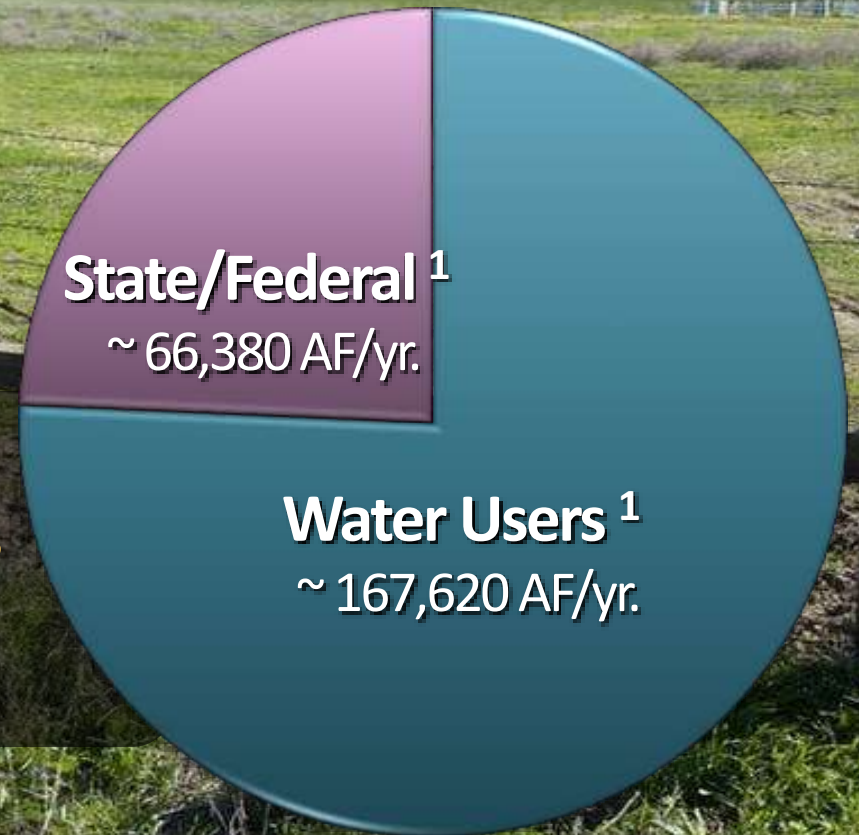


# Sites Reservoir

## Project Yield Estimate

### Annual Reservoir Release Estimate

- Average – 225,000 to 234,000 AF/yr. all participants (50,000 AF/yr. MWD's share)
- Dry/Critical – 348,000 to 427,000 AF/yr.



<sup>1</sup> Federal share subject to appropriation; User share subject to Board authorization; State share subject to final approval by California Water Commission

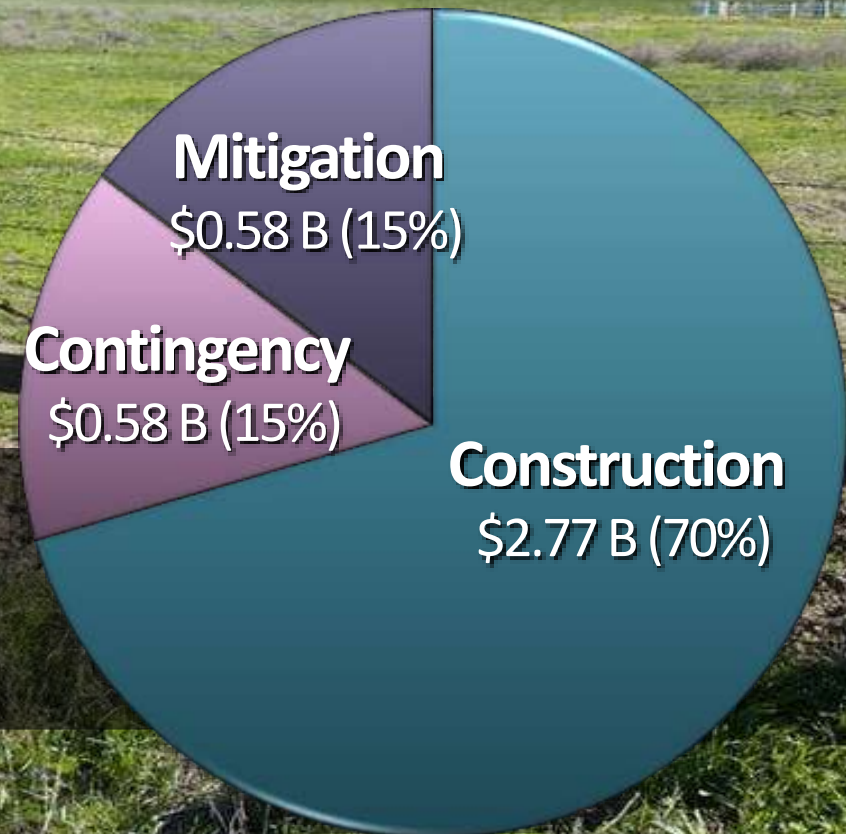


# Sites Reservoir

## Project Cost Estimate

### Cost Estimate (2021\$)<sup>1</sup>

- Total Project Cost Estimate ~ \$3.93 billion
- Reservoir Release Estimate ~ \$800/acre-ft.



<sup>1</sup> Construction costs are based on a Class 4 cost estimate;



## Key Benefits

- Improves ability in meeting future climate change challenges
- Mitigates for decreased snowpack and increased rainfall
- Dedicates portion of new storage for environmental use only
- Important collaborative approach among northern & southern California water agencies

# Topics

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The background of the slide is a photograph of a large, circular meeting room. Numerous people are seated around a large, dark wooden conference table. In the center of the room, a large circular seal is visible on the wall. To the right, a large screen displays a colorful image. The room has a high ceiling with recessed lighting. The title "Metropolitan Board Funding Considerations" is overlaid on the top half of the image in a large, bold, yellow and white font.

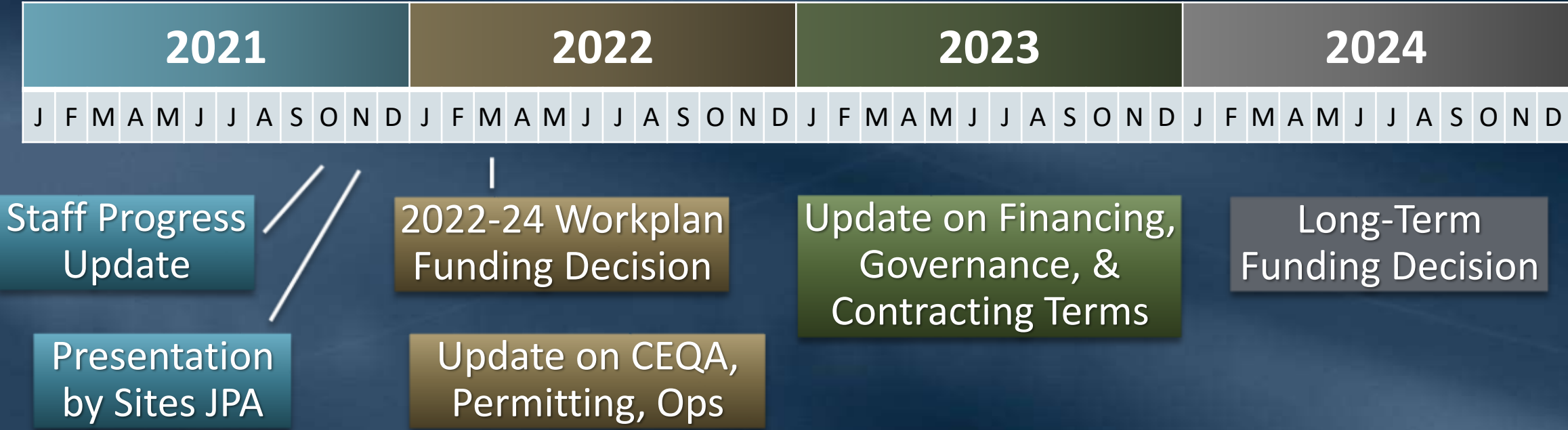
# Metropolitan Board Funding Considerations

- 2017
  - \$1.5 million cost-share for 2017-18 Sites Reservoir workplan
- 2019
  - \$4,212,500 cost-share for 2019-20 Sites Reservoir workplan
- 2020
  - \$5 million cost-share for 2020-21 Sites Reservoir workplan
- 2022 (Proposed Action)
  - \$20 million cost-share for 2022-24 Sites Reservoir workplan



# Metropolitan Board

## Proposed Timeline <sup>1</sup>



1. Subject to change





# Topics

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# Summary & Next Steps

- Incremental funding approach used to inform Board's decision on future participation
- Complete permits & revised environmental documents (EIR/EIS) by mid-2022
- Decision of project implementation in 2024









## ● Bay-Delta Management Report

### Summary

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

### Purpose

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Informational

### Detailed Report

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#### Long-Term Delta Actions

##### Delta Conveyance

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

Field activities in the Delta for Soil Investigations are proceeding to support the Initial Study/Mitigated Negative Declaration (including cone penetration tests, soil borings, and geophysical surveys). Field investigations will continue in mid-September following a short break from July-August 2021.

DWR completed the last of the four technical webinars designed to inform the public and interested stakeholders about the approaches and methodologies used in conducting impact analyses in the Draft EIR. The final webinar on Environmental Justice was presented on September 16. All webinars were recorded and made available on DWR's website (<https://water.ca.gov/Programs/State-Water-Project/Delta-Conveyance/DCP-Informational-Webinars>). Information about impact findings and specific mitigation measures were not available for the webinars and will be included in future outreach efforts following publication of the public Draft EIR.

##### Joint Powers Authorities

The regularly scheduled Delta Conveyance Design and Construction Authority (DCA) Board of Directors meeting was held on September 16 and included regular staff reports and updates. The DCA Stakeholder Engagement Committee met on September 22, where air quality and greenhouse gas methodologies used in CEQA analyses were presented by DWR.

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

##### Sites Reservoir

In their joint September 22 meeting, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) gave the Executive Director authorization to execute a three-party agreement between the Authority Board, DWR, and Sites Reservoir participants that are also State Water Project (SWP) Contractors to include the planning costs for the Sites Reservoir Project in the SWP Annual Statement of Charges.

The Authority Board and Reservoir Committee also approved Amendment 3 of the Project Agreement and Work Plan with a period of performance from January 1, 2022 to December 31, 2024 for the purpose of initiating participant home board review, deliberation and execution of the agreement. The Executive Director was also given authorization to execute a Federal Financial Assistance Agreement with the U.S. Bureau of Reclamation (Reclamation) for \$6.9 million in WIIN Act Funds, and the authorization to submit the Final Water Storage Investment Program Feasibility Report to the California Water Commission to comply with Proposition 1.

## Board Report (Bay-Delta Management Report)

### Near-Term Delta Actions

#### Regulatory Activities

In response to ongoing drought conditions and associated water supply shortages in the Sacramento-San Joaquin Delta watershed, on August 3, 2021, the State Water Resources Control Board (State Board) adopted a Delta watershed emergency regulation authorizing the curtailment of diversions when water is determined to be unavailable. On August 20, 2021, the State Board issued curtailments to approximately 4,500 water right holders in the Delta watershed to help protect drinking water supplies, prevent salinity intrusion, and minimize impacts to fisheries and the environment. The SWP has rights for the diversion of water to Lake Oroville, as well as rights in the south Delta for the diversion and re-diversion of stored water. These rights are post 1914 appropriative and consequently are impacted by the State Board curtailment orders. DWR is working closely with State Board staff and Reclamation to ensure that the water projects are working together to achieve compliance.

At this time, the State Board has determined that riparian water right permits will not be curtailed in the Sacramento and San Joaquin Basins, including the Bay-Delta. Metropolitan holds riparian water right permits on its Delta island properties and, although not mandated to curtail diversions, Metropolitan staff is meeting with its Delta island agricultural lessees to assist in voluntary cutbacks.

Staff continued to participate in the collaborative groups called for in the 2019 Biological Opinions (BiOp) for the 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.

Staff continued collaboration with the state and federal agencies to develop a monitoring program for steelhead as a condition of the 2019 BiOp. The monitoring plan would encompass steelhead populations within the San Joaquin Basin and/or the San Joaquin River downstream of the confluence of the Stanislaus River, and would include steelhead and rainbow trout. The group is drafting conceptual models for each life stage of steelhead to help identify monitoring needed for each life stage.

#### Science Activities

Staff continued efforts to develop studies to assist in preserving Delta smelt and evaluating existing ponds on Metropolitan's Delta Island properties to assess the suitability of the ponds for Delta smelt research. On September 15, staff hosted the Deputy Directors of DWR, their staff, and UC Davis researchers for a Bouldin Island tour to provide information and develop opportunities for collaboration on projects on the Delta Island properties. The main projects discussed included floating wetlands, Delta smelt mesocosms, and levee security.

On September 2, staff participated in the U.S. Fish and Wildlife Service (USFWS) Longfin smelt Workshop for the Species Status Assessment (SSA) and presented work on predictive mapping for larval/juvenile longfin smelt habitat. USFWS is considering scientific information to inform a federal decision regarding whether the longfin smelt should be listed under the federal Endangered Species Act. The workshop included presentations on the biology, ecology, distribution, and abundance of longfin smelt to inform USFWS SSA on longfin smelt.

Staff also continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). At the September 21 meeting, CAMT discussions focused on planning for a workshop to evaluate information from past reviews of Delta monitoring programs, and on potential science activities for the CAMT technical teams. Staff continued collaboration with the non-governmental organization participants on the CSAMP Salmon Recovery Initiative. The group is currently planning the second workshop to define salmon recovery in a broad sense through scientific technical discussions with salmonid experts.