



# Review of the Remaining Planning Process and Funding Needs for Sites Reservoir Project

Water Planning & Stewardship Committee

Item 9-3

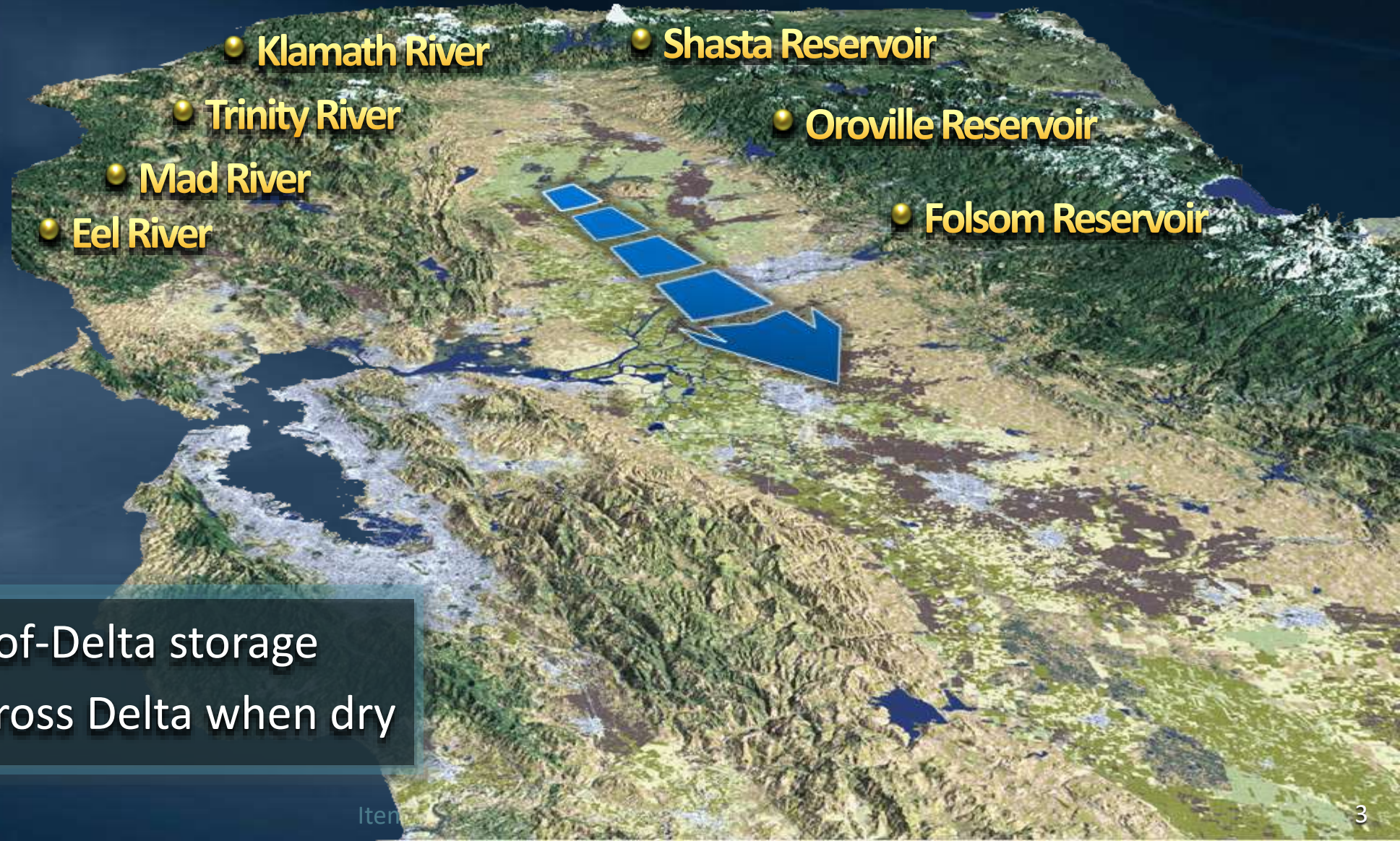
March 7, 2022

# Topics

- Storage Supplies & Lessons Learned  
Integrated Groundwater & Surface Storage
- Sites Reservoir Planning Status  
Key Progress & 2022-2024 Workplan
- Project Benefits  
Statewide & Metropolitan Specific
- Participation & Funding Consideration  
Previous & Upcoming Decision
- 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

- Develop diverse portfolio, including GW banking & off-stream storage
- Integrate surface reservoir and groundwater recharge operations



# Climate Resiliency 2010s



- Adapt & mitigate the impacts that snow will increasingly fall as rain
- Adapt to increased winter flooding, & reduced Spring/Summer runoff

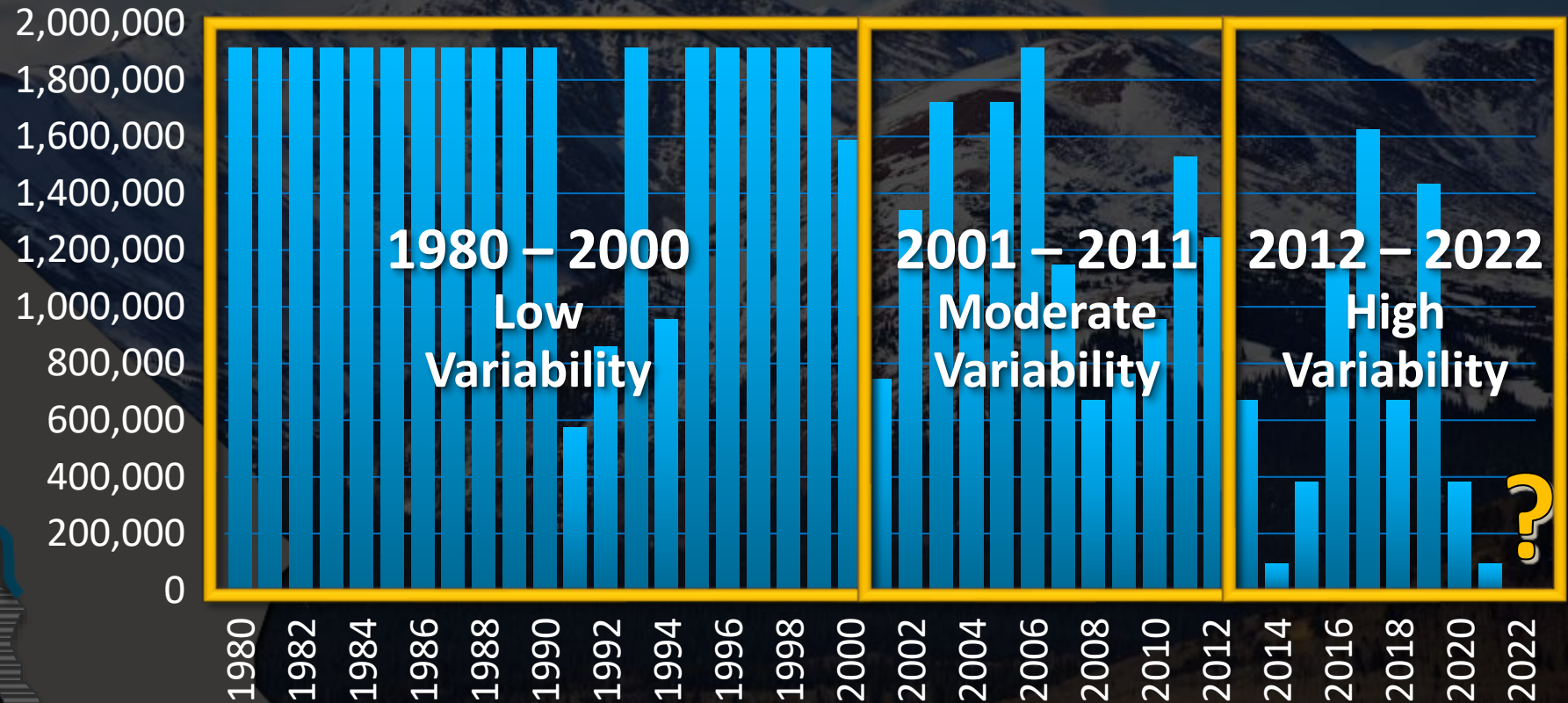


# Lessons Learned

## Snowpack Reservoir & SWP Water Allocation

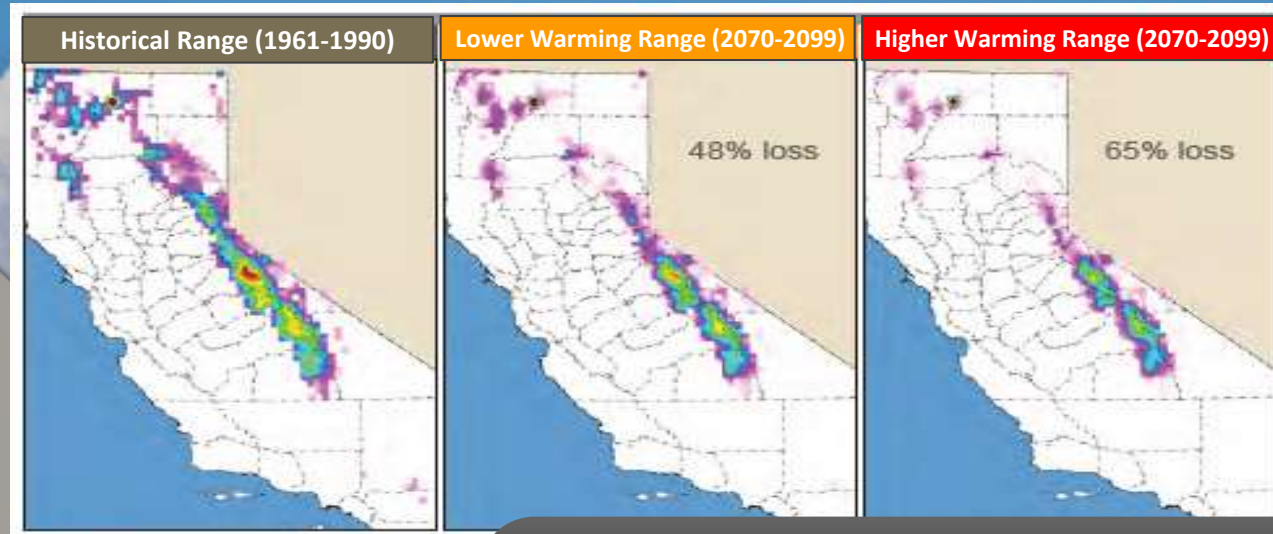


### State Water Project Allocation



# Lessons Learned

## Snowpack Reservoir & SWP Water Allocation



### Climate Research

- 30 to 65% of snowpack (4-9 million AF) will fall as rain by 2100
- Existing reservoirs not designed to handle faster runoff
- Lower river flows in the spring/summer for fish and water supply



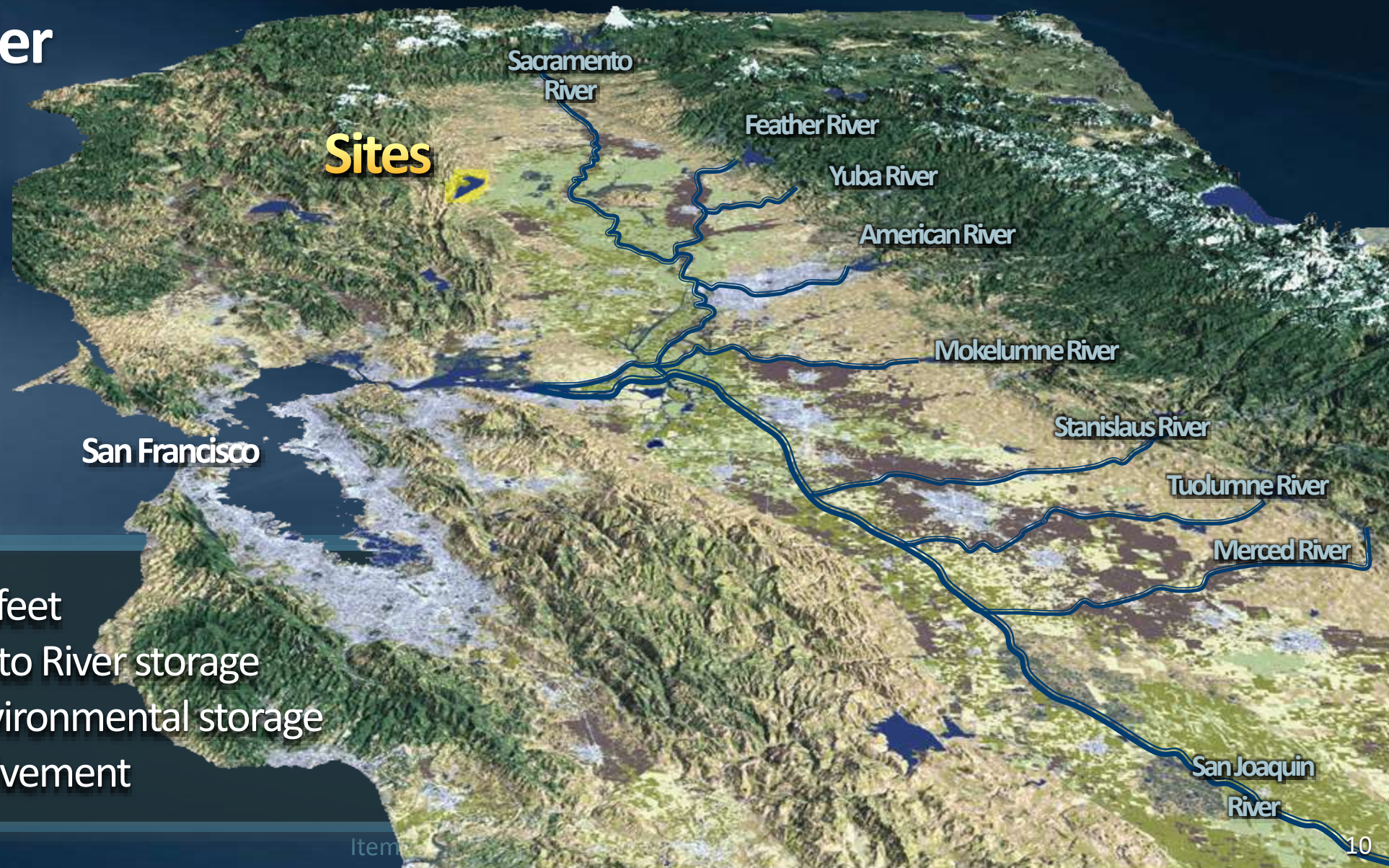
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# Sites Reservoir

## Proposal Under Analysis



- 1.3 – 1.5 million acre-feet
- Off-stream Sacramento River storage
- Largest dedicated environmental storage
- Broad statewide involvement



# 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 – 207,000 to 260,000 AF/yr. all participants (50,000 AF/yr. MWD's share)
- Dry/Critical – 348,000 to 427,000 AF/yr.

State/Federal <sup>1</sup>  
~ 66,380 AF/yr.

Water Users <sup>1</sup>  
~ 167,620 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

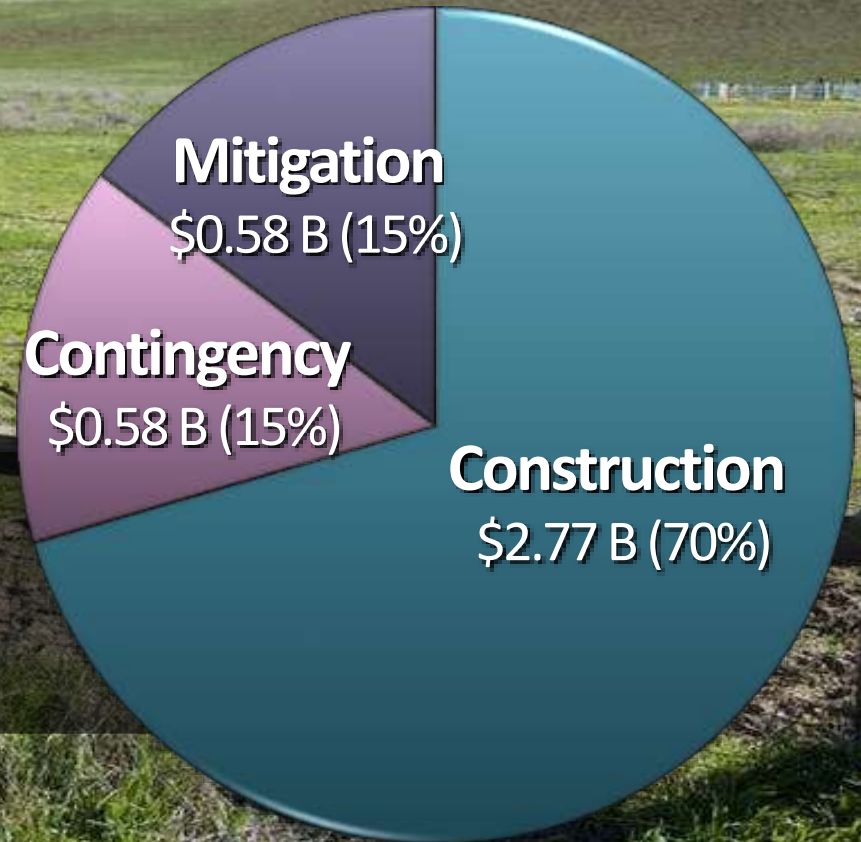


# Sites Reservoir Project Cost Estimate

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

- Total Project Cost Estimate ~ \$3.93 billion
- Reservoir Release Estimate ~ \$700-900/acre-ft.

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





# Key Progress

## ✓ Technical Analyses

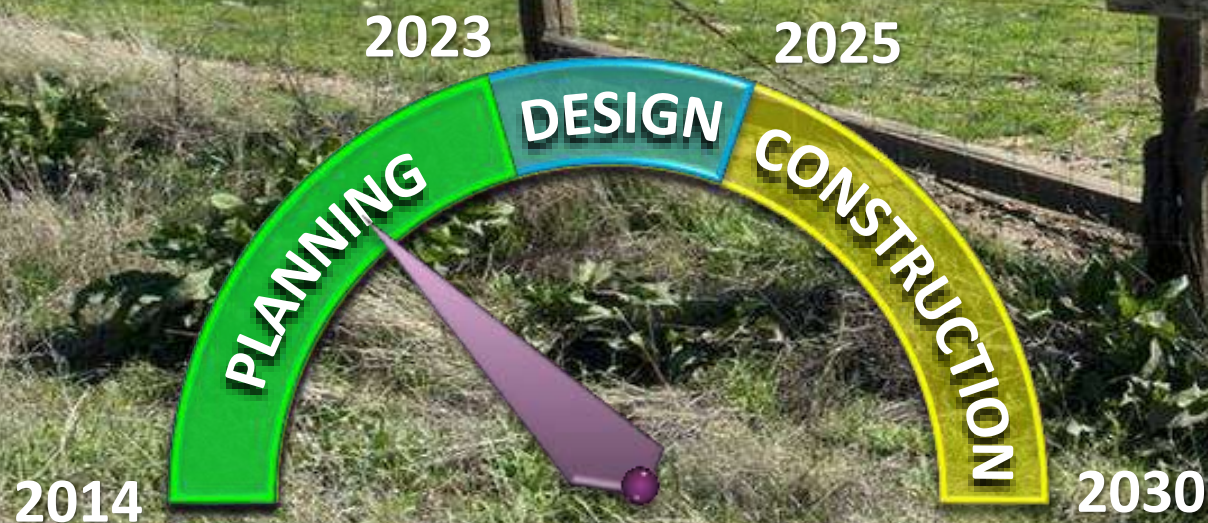
- Initial water supply modeling & operations
- Initial engineering design & cost estimates
- Value Planning project improvements

## ✓ Regulatory/Environmental

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

## ✓ State/Federal Funding

- \$836 million State Proposition 1 grant
- \$104 million federal WIIN Act grant
- \$449 million US Dept. of Agriculture loan
- \$600 million federal WIFIA loan (application)





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## Key Benefits – Overall

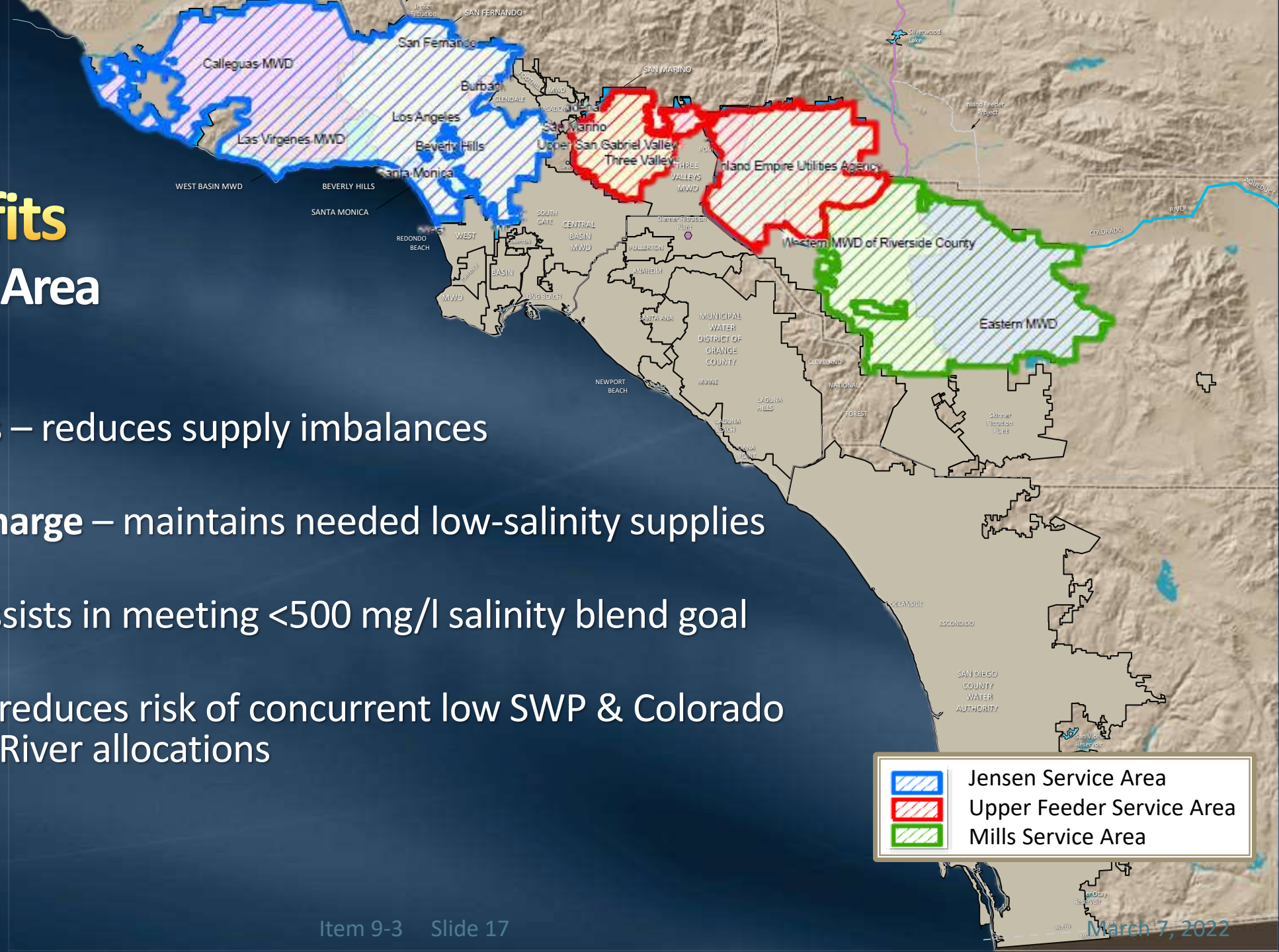
- Improves ability in meeting future climate change challenges
- Mitigates for decreased snowpack and increased rainfall
- Dedicates portion of new storage for environmental use only
- Important collaborative approach among northern & southern California water agencies






# Key Benefits

## MWD Service Area

- SWP Reliant Areas** – reduces supply imbalances
- Groundwater Recharge** – maintains needed low-salinity supplies
- Water Quality** – assists in meeting <500 mg/l salinity blend goal
- Perfect Drought** – reduces risk of concurrent low SWP & Colorado River allocations



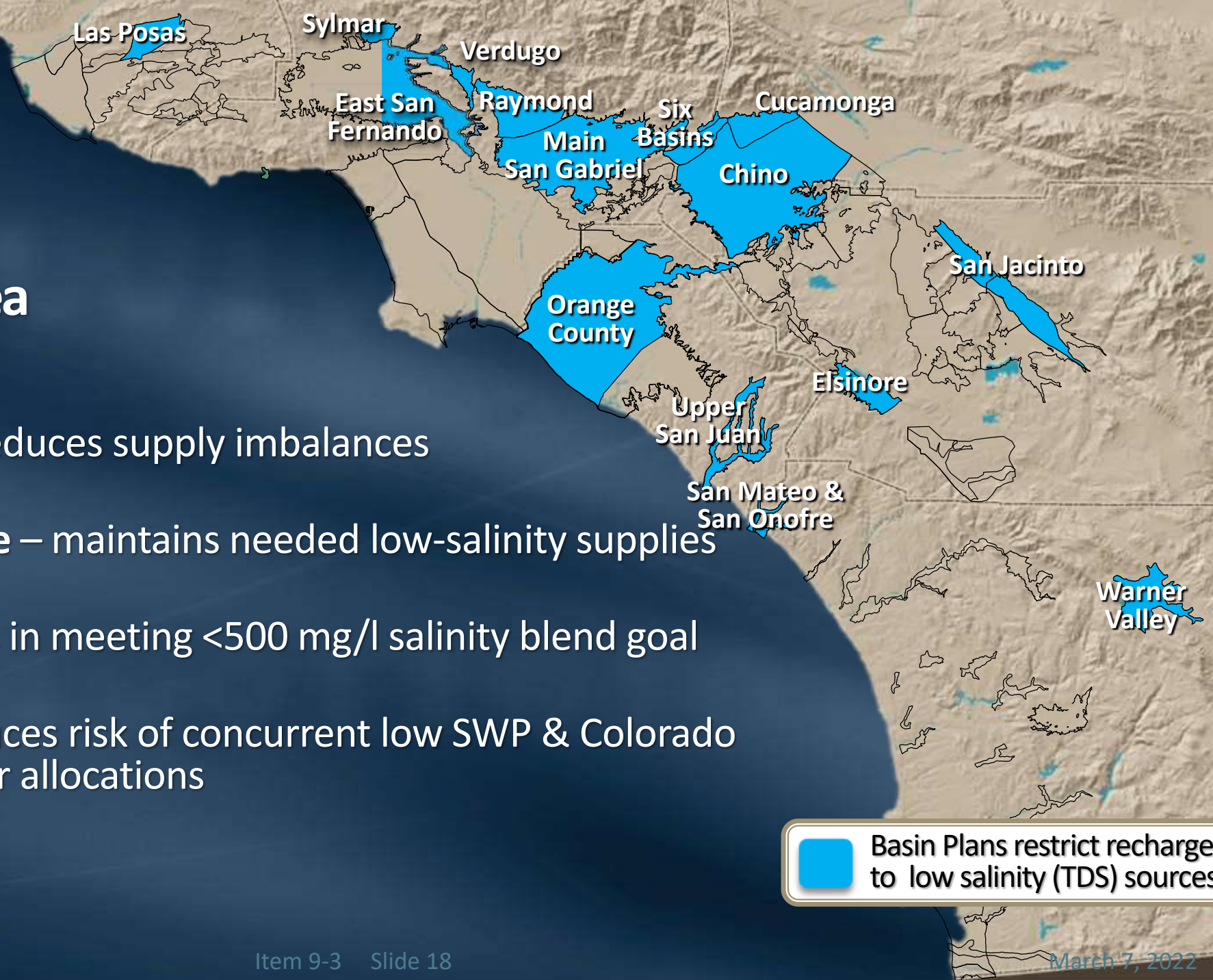
|   |                           |
|---|---------------------------|
|  | Jensen Service Area       |
|  | Upper Feeder Service Area |
|  | Mills Service Area        |



# Key Benefits

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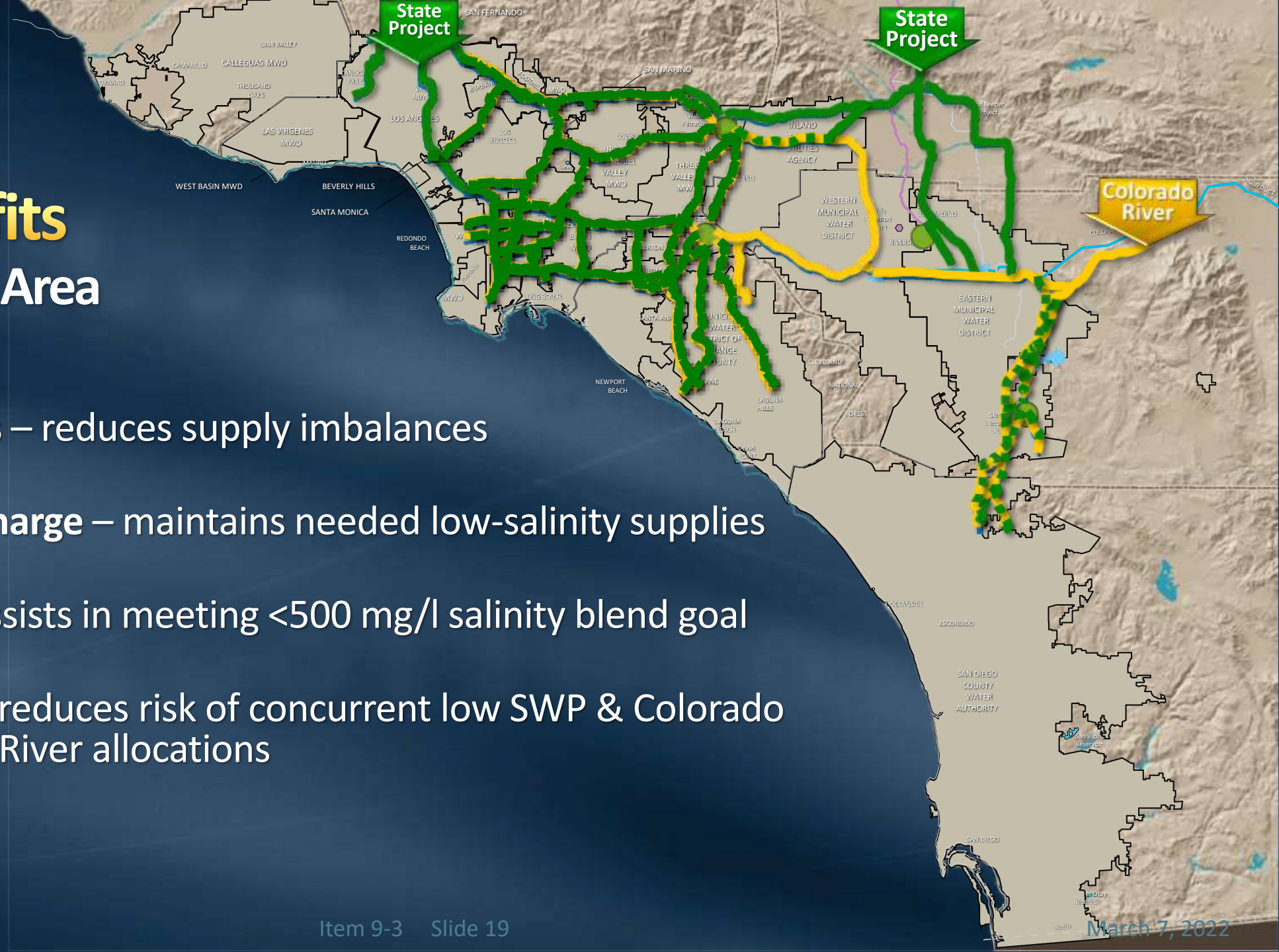




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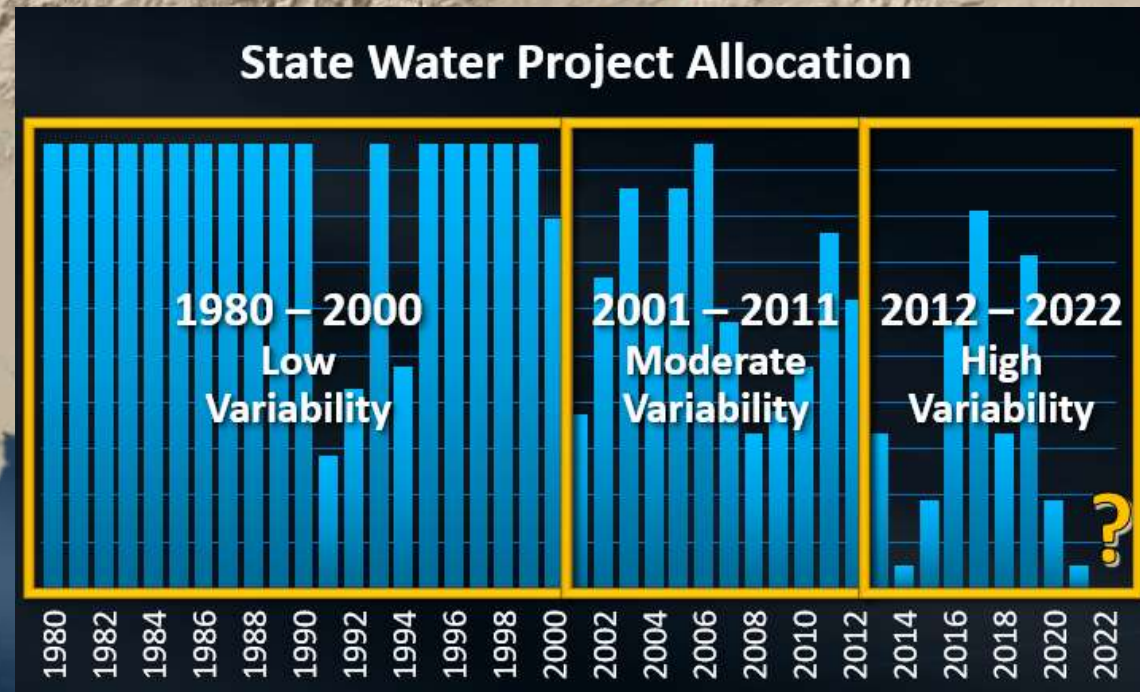




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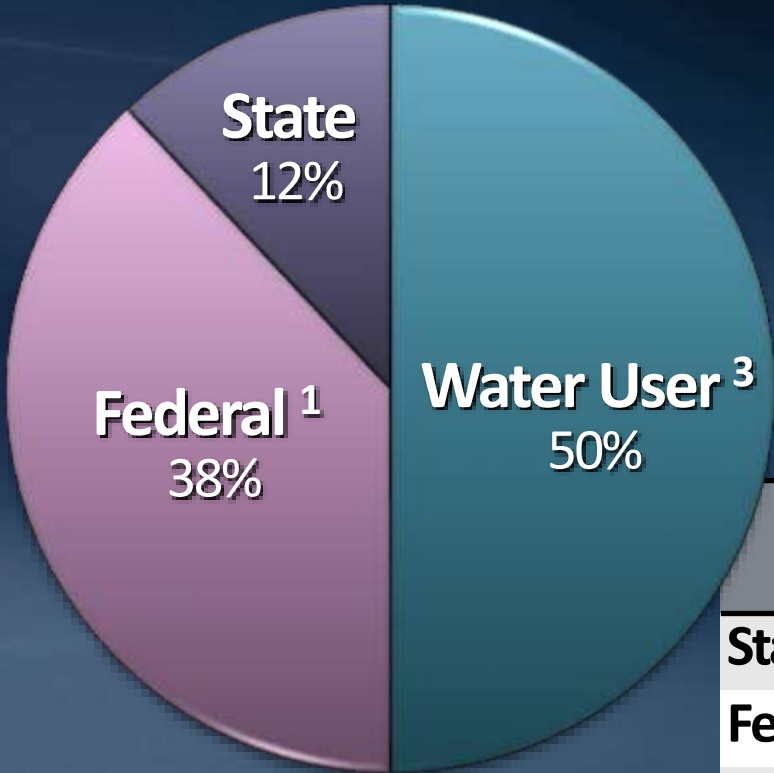
The slide features a background image of a large, circular conference room with a long table and many people seated around it. The room has a high ceiling with circular recessed lighting. A large circular seal is visible on the wall behind the table. Two large projection screens are on the right wall, one showing a group of people and the other showing a map. The title "Metropolitan Board Funding Considerations" is overlaid in the center 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)
  - \$20 million cost-share for 2022-24 Sites Reservoir workplan



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



| Source                                | 2022                 | 2023                 | 2024                 | Total                 |
|---------------------------------------|----------------------|----------------------|----------------------|-----------------------|
| <b>State (Prop 1 Grant)</b>           | \$ 18,300,000        | --                   | --                   | \$ 18,300,000         |
| <b>Federal (WIIN Act)<sup>2</sup></b> | \$ 10,000,000        | \$ 20,000,000        | \$ 20,000,000        | \$ 50,000,000         |
| <b>Water Users<sup>3</sup></b>        | \$ 17,267,000        | \$ 23,972,000        | \$ 27,324,000        | \$ 68,563,000         |
| <b>Carryover Funds</b>                | \$ 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>          | \$ 5,000,000         | \$ 7,000,000         | \$ 8,000,000         | <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)



# 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

1. 2022-24 Workplan, also referred to as the Amendment 3 Workplan

Reservoir overlook – Governor Brown (2018)



# Broad Statewide Involvement

## ● Bay Area

- Santa Clara Valley WD
- Zone 7 Water Agency

## ● San Joaquin Valley

- Rosedale-Rio Bravo WSD
- Wheeler Ridge - Maricopa

## ● Southern California

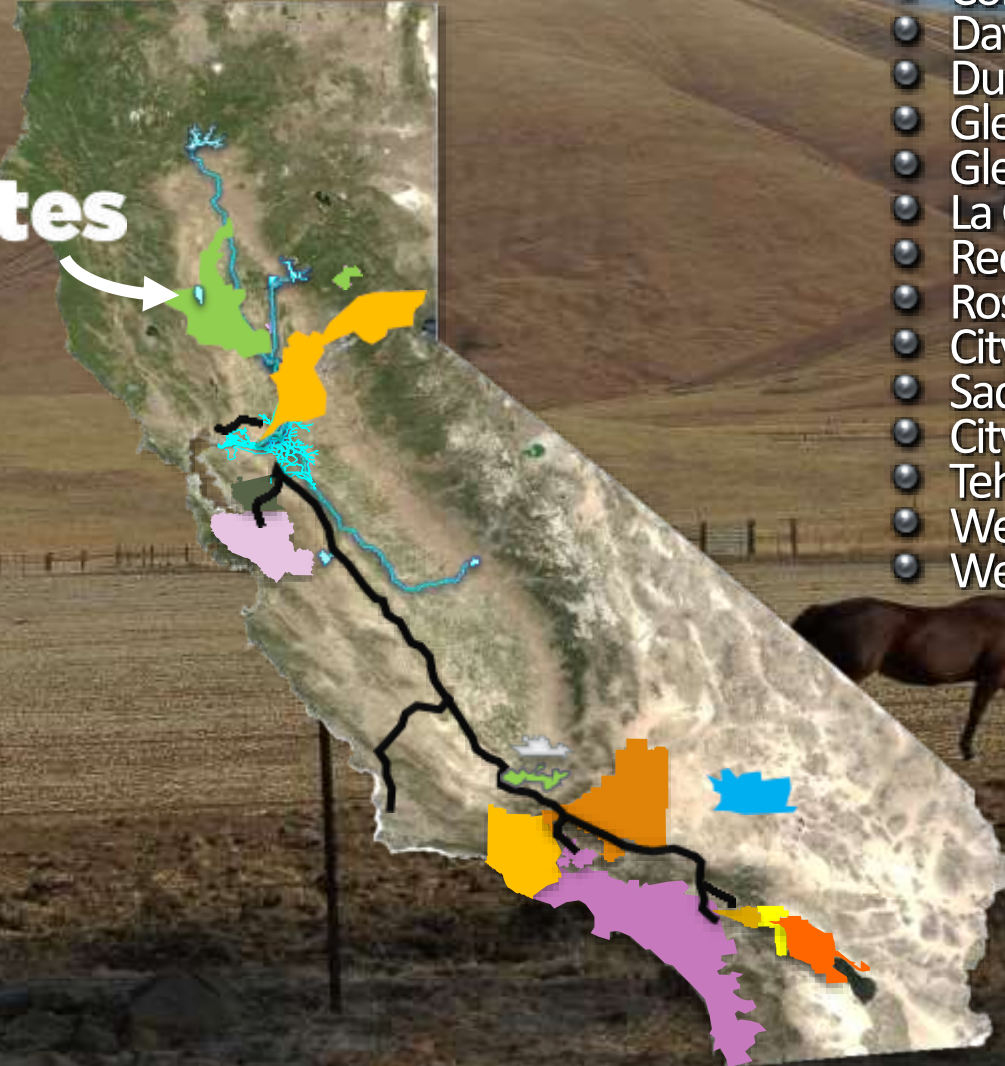
- Antelope Valley - East Kern WA
- Coachella Valley WD
- Desert Water Agency
- Irvine Ranch Water District
- Metropolitan Water District
- San Bernardino Valley MWD
- San Geronio Pass Water Agency
- Santa Clarita Valley Water Agency

## ● State/Federal

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



Sites



## ● 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

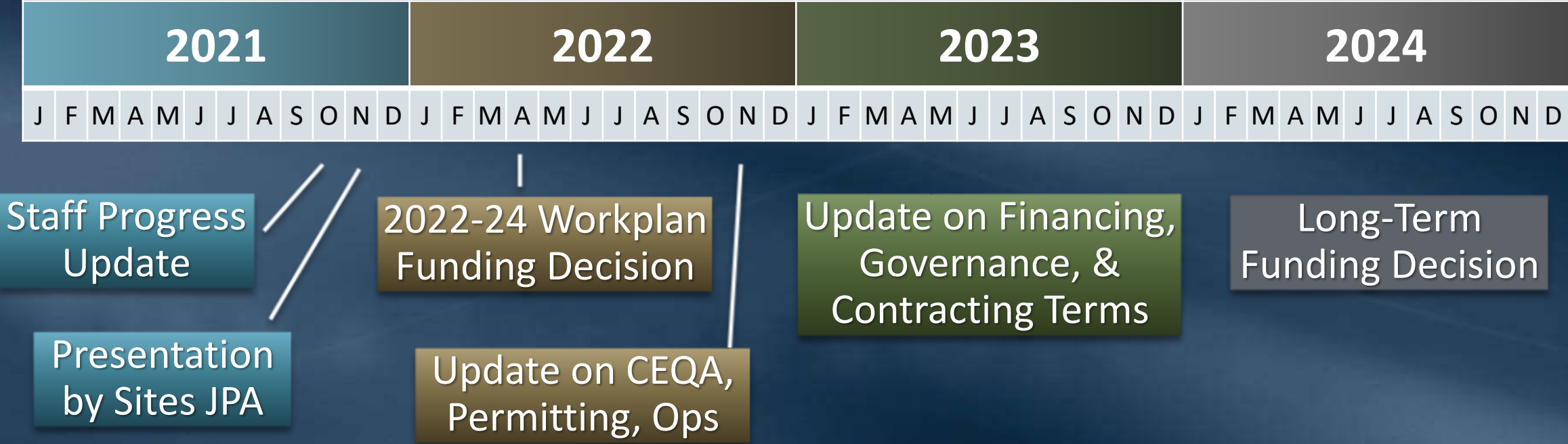


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# Metropolitan Board Proposed Timeline <sup>1</sup>



1. Subject to change



# Next Steps

- April 2022 Board letter on funding 2022-24 Workplan
- Final environmental documents by Oct 2022
- Decision on project implementation in 2024



