



## The meeting teleconference will begin shortly

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# Call to Order

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Board of Directors Workshop - Resources  
Thursday, July 2, 2020

*Chairperson – Director Hayes*  
*Vice-Chair – Director Harrison*



# Introductions

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*Following the introduction of Directors and District staff, participants may use this time to state their name and agency/affiliation in order to be included in the formal record of attendees.*

# Public Comment

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Any person may address the Board on matters within its jurisdiction.

- *Please use the chat feature on the Zoom toolbar or digitally raise your hand to let the moderator know you would like to make a comment.*



# Summary of Previous Meeting (Pg. 3)

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Board of Directors Workshop – Resources - June 4, 2020



# Discussion Item 4.1 (Pg. 7)

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**Bob Tincher, PE, MS** – Deputy GM/Chief Water Resources Officer

Consider Cooperative Study Program with the United States Geological Survey for 2020-21

## **Staff Recommendation**

Authorize staff to forward this request to the Board of Directors to enter into the cooperative program Joint Funding Agreement with the United States Geological Survey for the fiscal year 2020-21 investigation program for a total cost of \$513,146.

# **USGS Science Support for the San Bernardino Area, California**

**Wesley R. Danskin**

**Research Hydrologist**

**United States Geological Survey**

**Ayman Alzraiee**

**Larry Brown**

**Geoff Cromwell**

**John Engott**

**Claudia Faunt**

**Brock Huntsman**

**Greg Mendez**

**Linda Woolfenden**

**Scott Wright**

# USGS Program — Data and Interpretations

## Data

- Surface water
- Ground water

## Interpretations

- 1 – Bunker Hill and Lytle Creek Basins
- 2 – Yucaipa Basin
- 3 – Rialto–Colton Basin
- 4 – Santa Ana River
- 5 – Fish study
- 6 – Upper Santa Ana River Integrated Model



## Data — Surface water



## Data — Groundwater



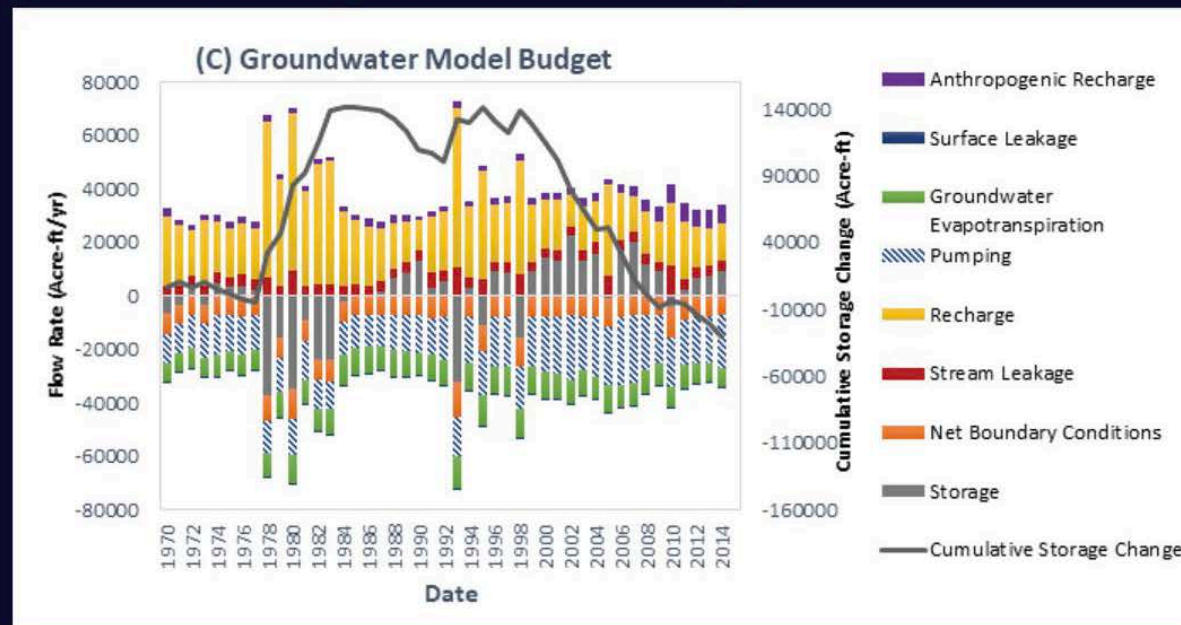
# 1 – Bunker Hill and Lytle Creek Basins

- a. Provide technical outreach
- b. Rehabilitate USGS monitoring-well sites
- c. Followup on prior rehabilitation of USGS well sites



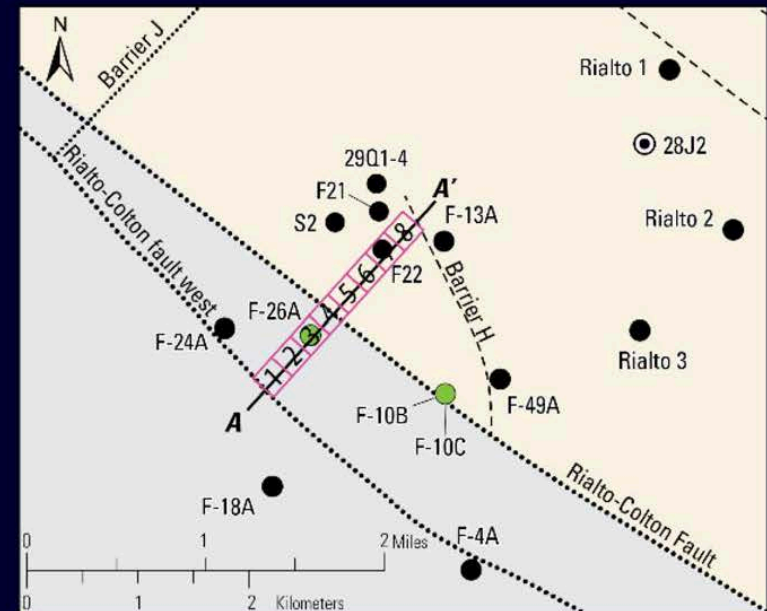
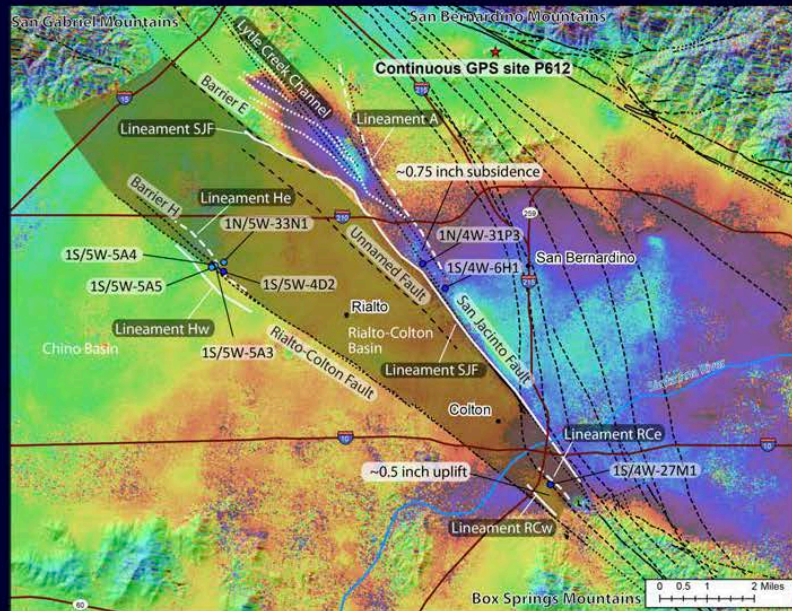
## 2 – Yucaipa Basin

- Provide technical outreach
- Integrate hydrologic model scenarios
- Distribute nitrate report for review
- Analyze groundwater age and stable isotopes



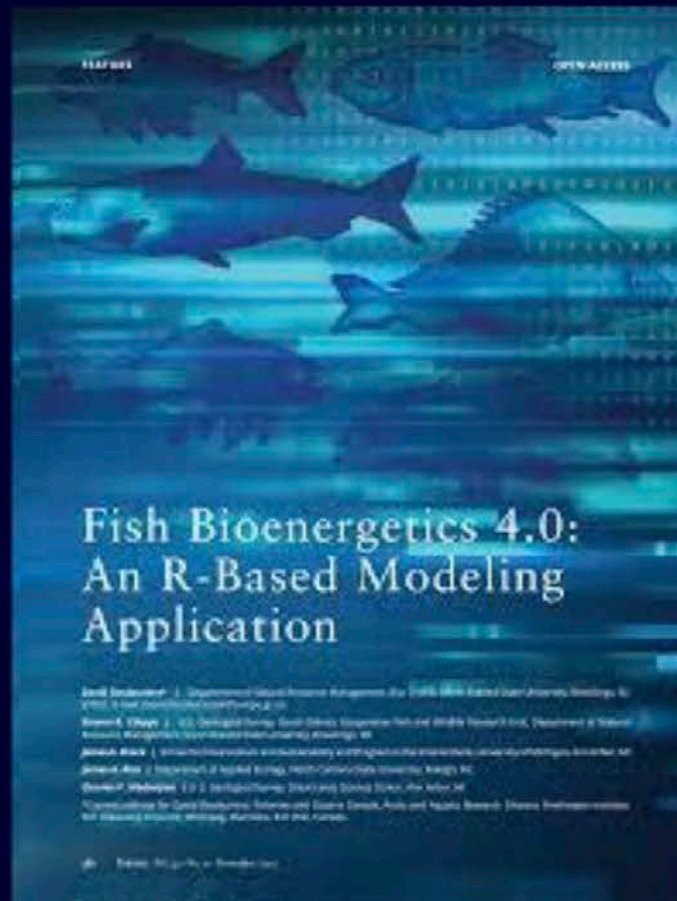
### 3 – Rialto–Colton Basin

- a. Provide technical outreach
- b. Document InSAR analysis
- c. Document model of flow across Rialto-Colton fault
- d. Document model of wellbore flow in Rialto #6 well



## 4 – Santa Ana River

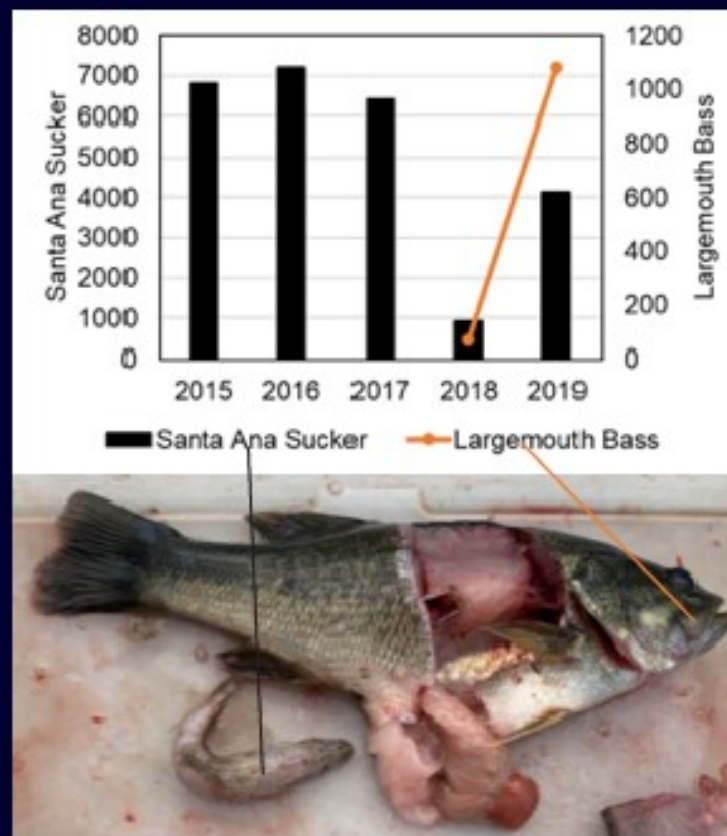
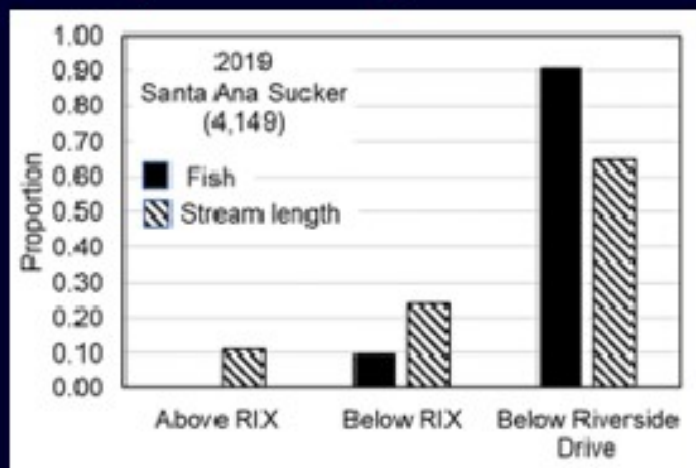
### a. Document effect of wastewater discharges on river habitat



## 5 – Fish studies

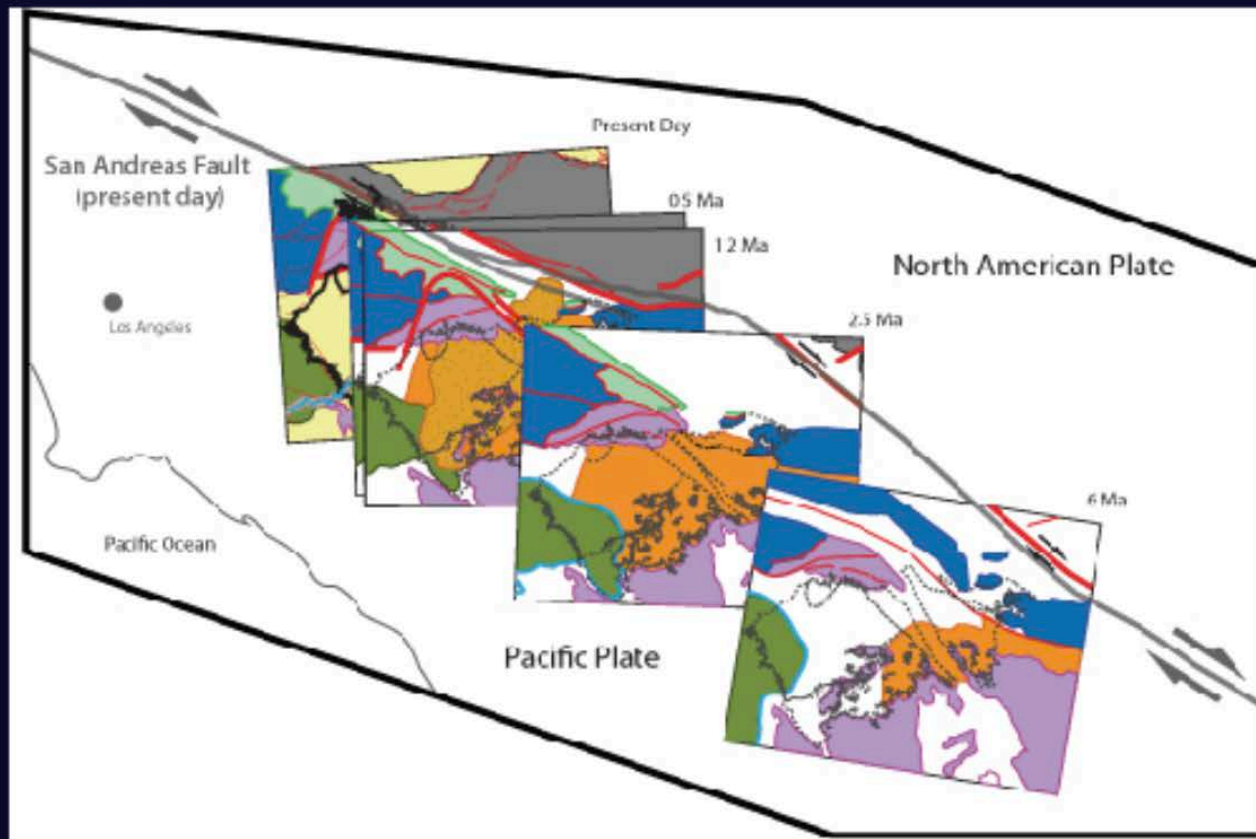
a. Develop population estimate for native fish species

b. Develop a bioenergetics model for Largemouth Bass



## 6 – Upper Santa Ana River Integrated Model

- Provide technical support
- Prepare report on the geology of the Upper Santa Ana Basin





Thank you ! — for decades of working together



# Director Comments and Discussion

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**T. Milford  
Harrison**  
President



**Paul  
Kielhold**  
Vice President



**Susan  
Longville**  
Treasurer



**June  
Hayes**  
Director



**Gil  
Navarro**  
Director

## Staff Recommendation

Authorize staff to forward this request to the Board of Directors to enter into the cooperative program Joint Funding Agreement with the United States Geological Survey for the fiscal year 2020-21 investigation program for a total cost of \$513,146.



# Discussion Item 4.2 (Pg. 20)

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**Bob Tincher, PE, MS** – Deputy GM/Chief Water Resources Officer

## Consider Continued Participation in the Sites Reservoir Project

### Staff Recommendation

Direct staff to place the Sites Second Amendment to the 2019 Reservoir Project Agreement dated as of April 1, 2019 by and Among Sites Project Authority and the Project Agreement Members Listed Herein, at a total cost to Valley District of \$2,140,000, on an upcoming Board of Directors agenda for consideration.

# Sites Reservoir Project: Amendment to Phase 2 Agreement



# Sites



Tehama-Colusa  
Canal

Glenn-Colusa  
Irrigation District  
Canal

Proposed  
Holthouse  
Reservoir

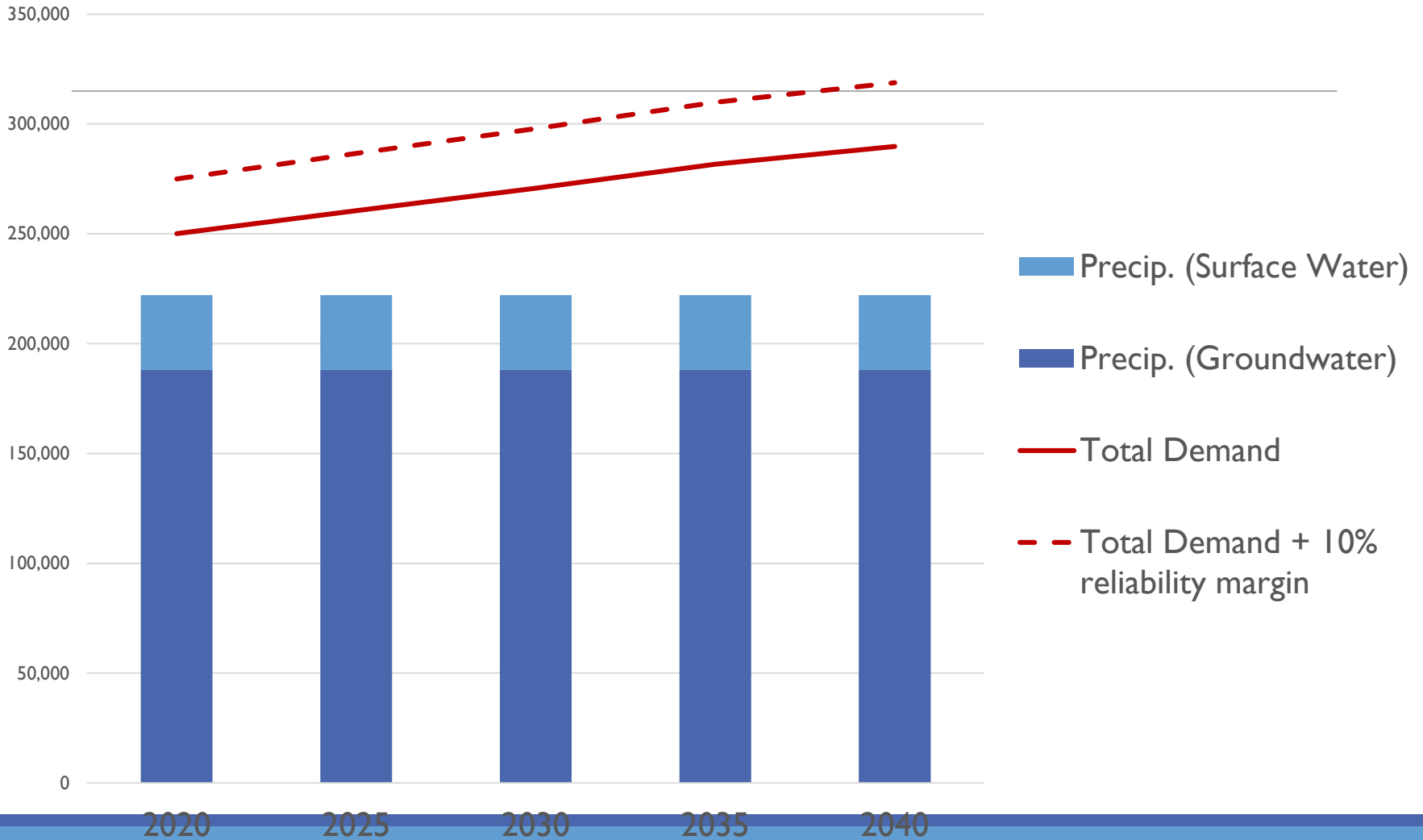
Proposed  
Terminal Regulating  
Reservoir

Proposed Sites Reservoir

# Local Rainfall is Not Enough



(Average Year, RUWMP)

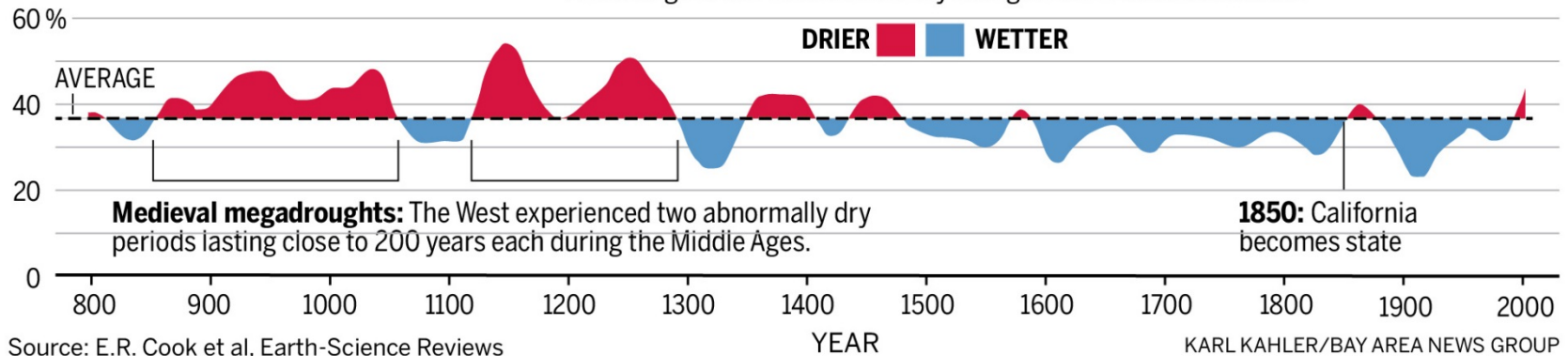


# WHAT IF DROUGHTS LAST LONGER?



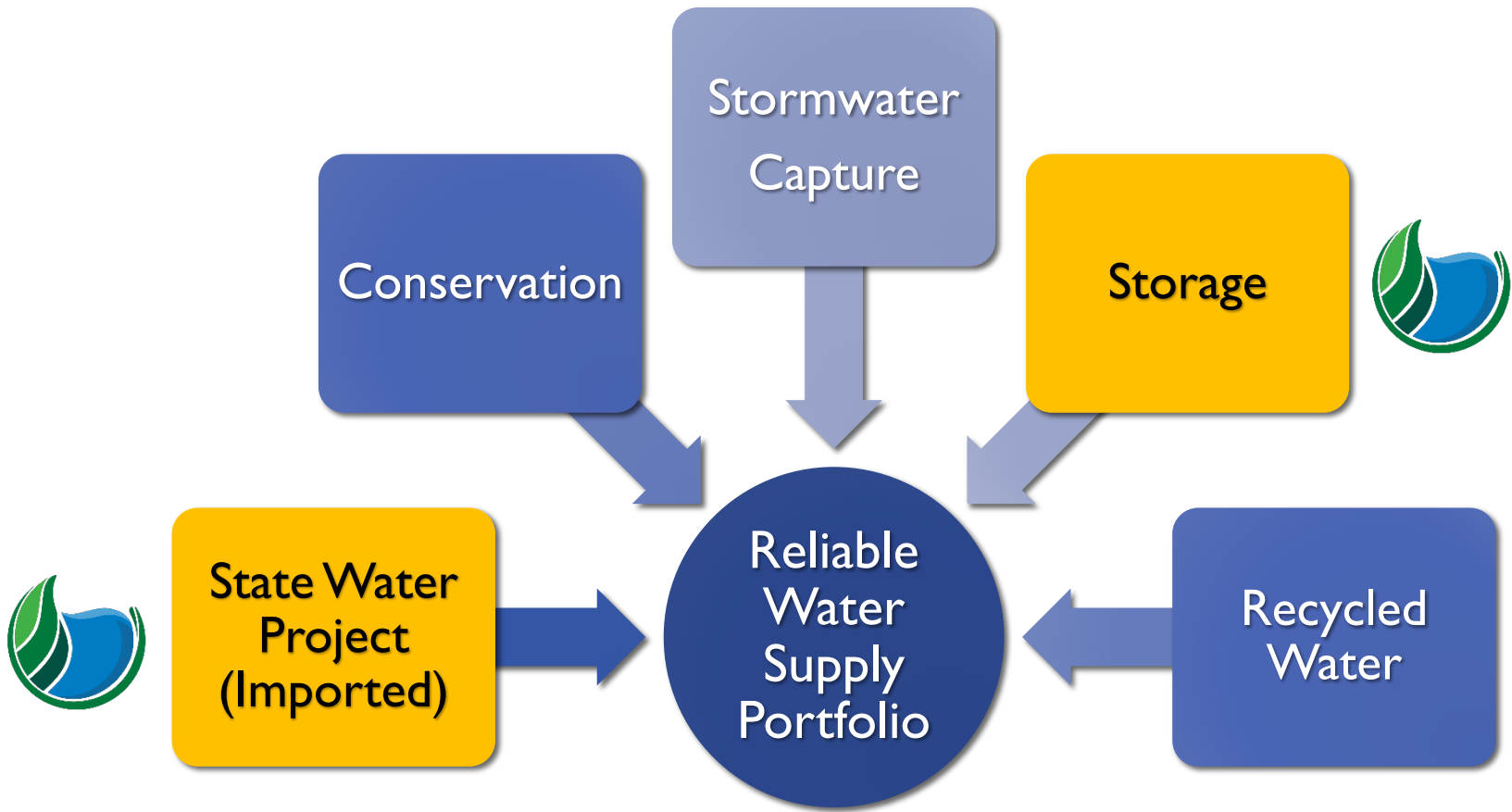
## A 200-year drought?

Evidence from tree rings shows that drought was historically much more widespread in the American West than now, while the 20th century was wetter than normal. Percentage of the West affected by drought from 800 A.D. to 2000:

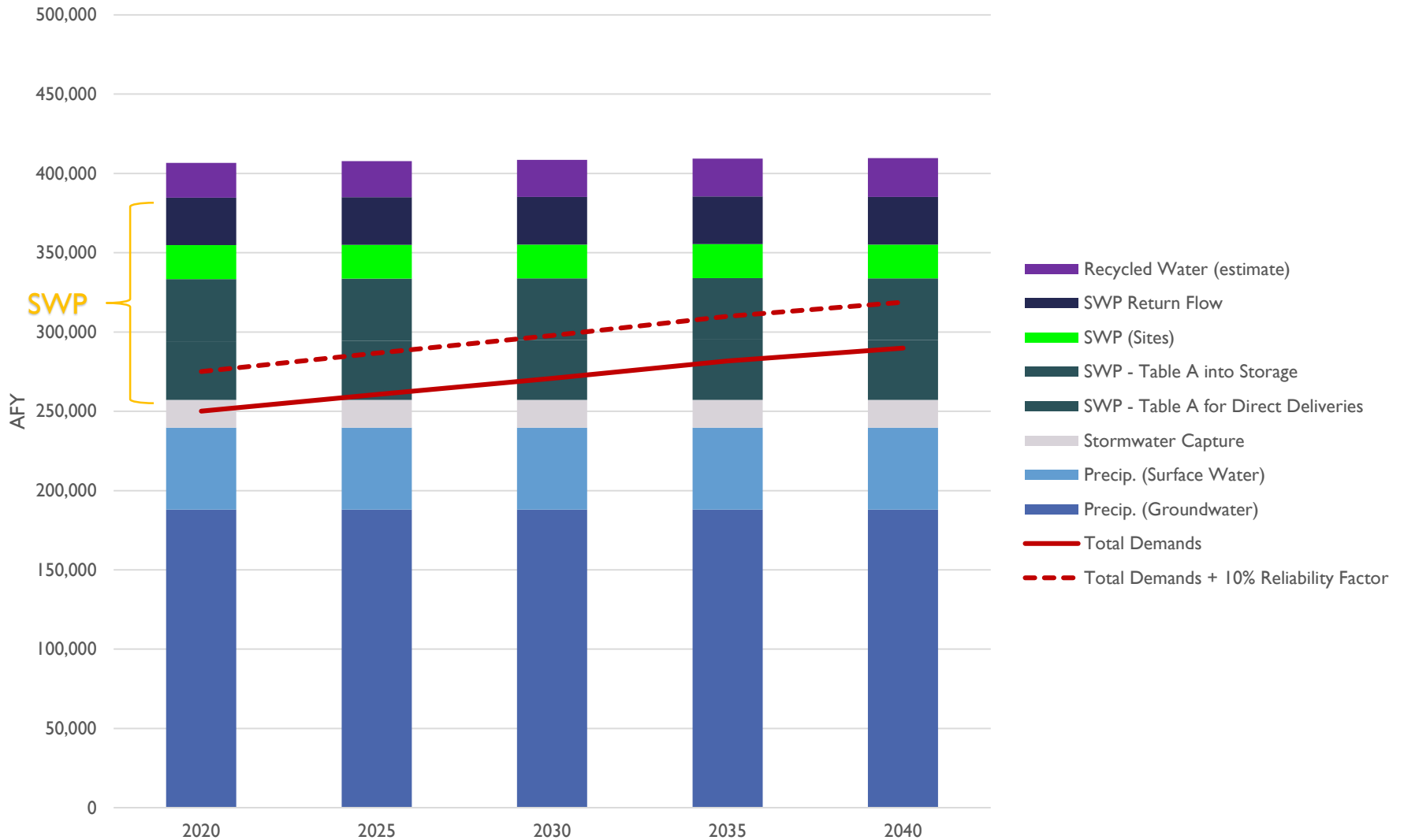


Source: E.R. Cook et al, Earth-Science Reviews

KARL KAHLER/BAY AREA NEWS GROUP



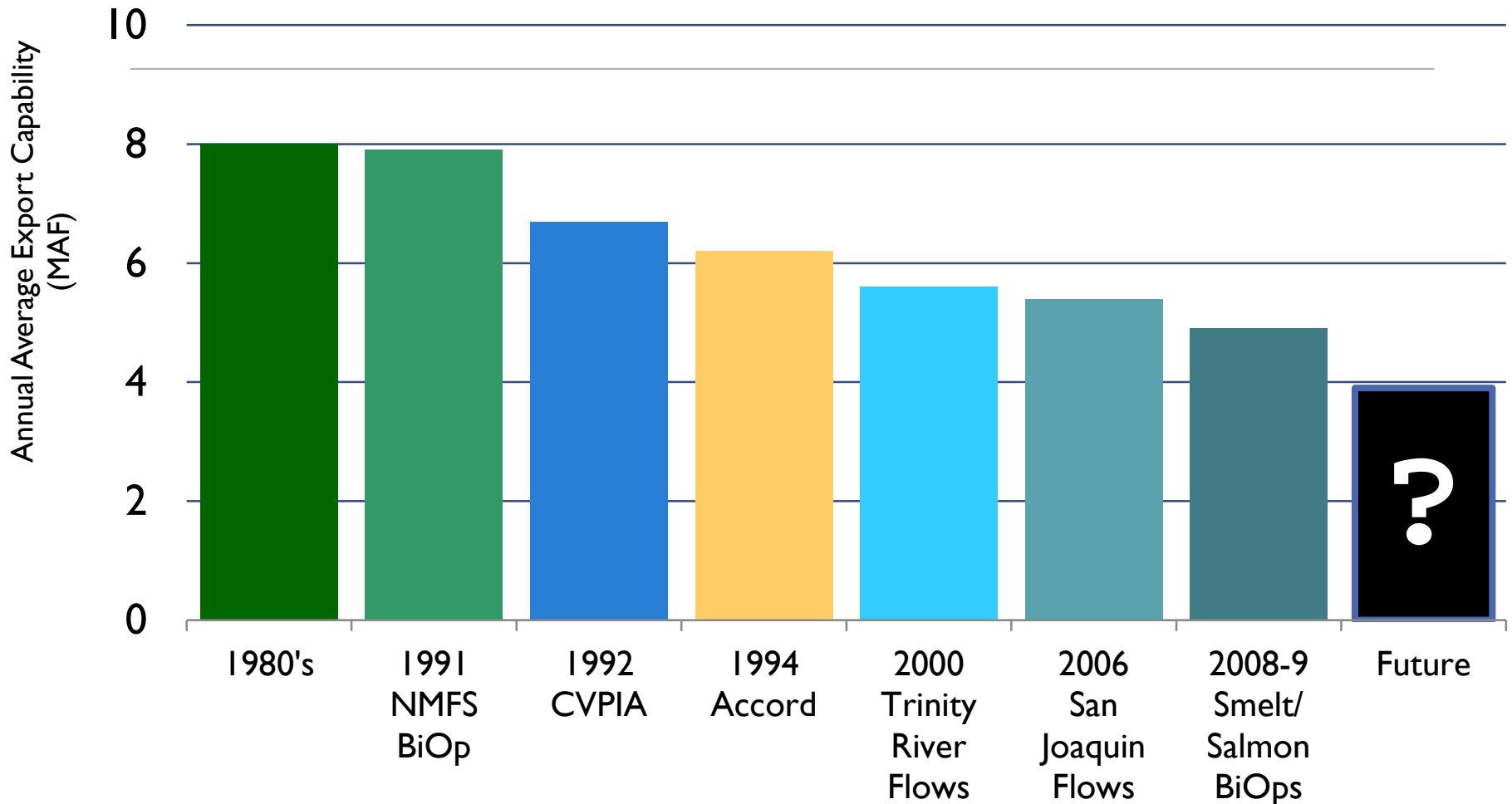
# Local Resources + SWP + Recycled + Stormwater Capture





# Decreasing Return on Investment

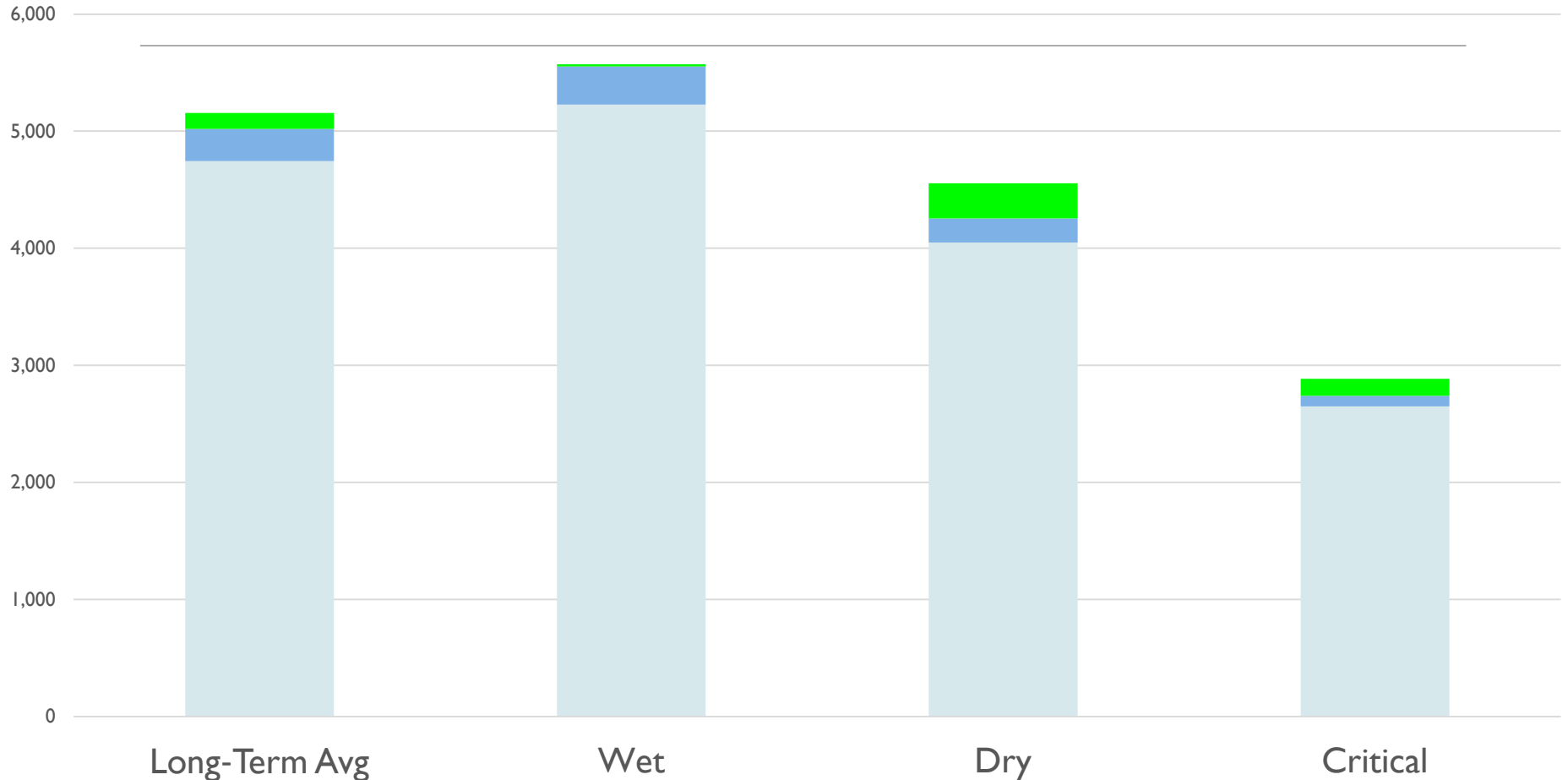
## Decline in Deliveries Due to Regulations



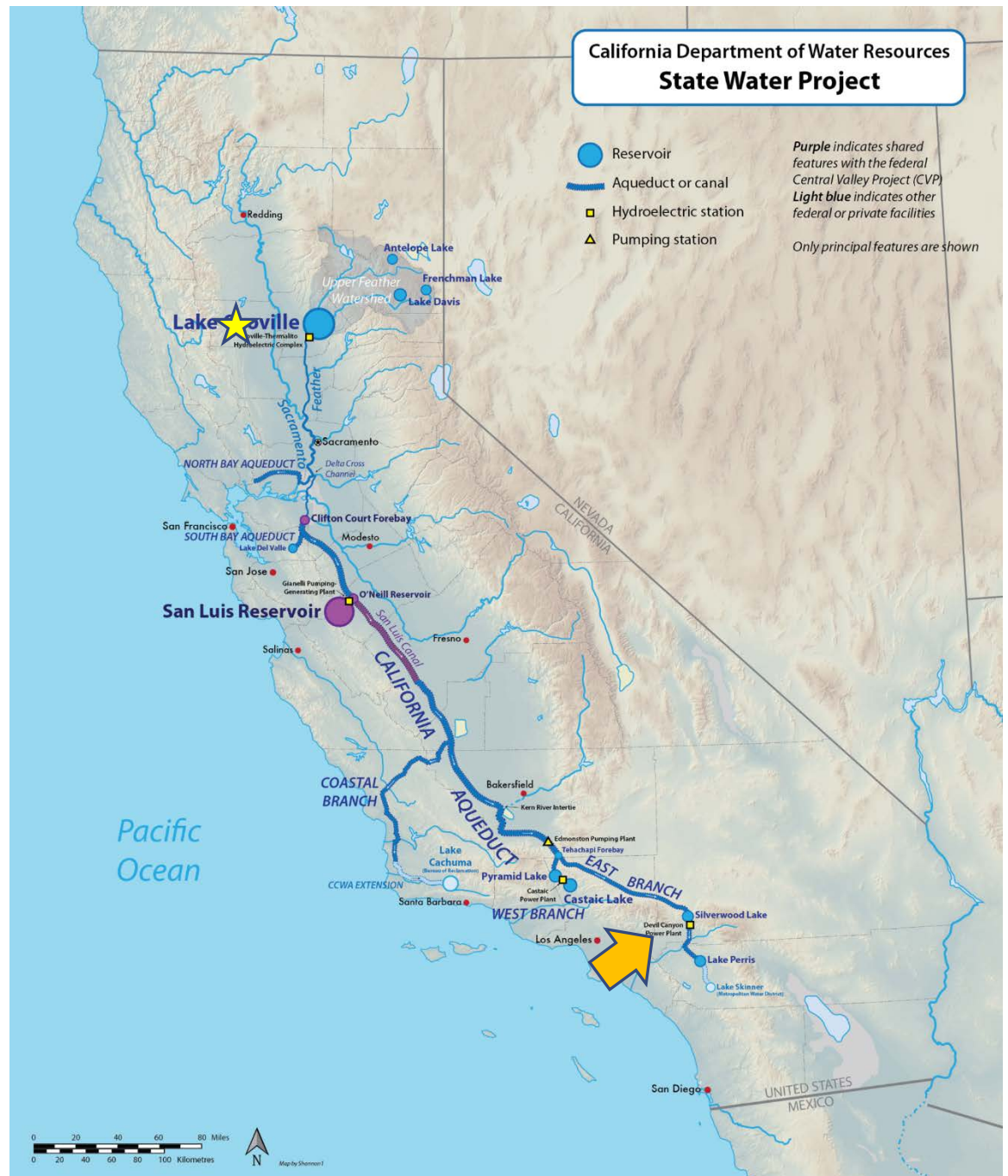
# Delta Conveyance and Sites Reservoir Help Recover Some of Our Losses



Current Delta Conv Sites



Sites is Available Because of Valley District's Investment in the State Water Project



# 21<sup>st</sup> Century Solution to California's Water Reliability Challenges

Sites Reservoir is a generational opportunity to construct a **multi-benefit** water storage project that helps **restore flexibility, reliability, and resiliency**



# We are On-Track to Deliver This Vital Project for the People of California

## Sites Project Authority has accomplished a lot since it was formed

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**2010:** Sites Project Authority is formed

**2016:** Reservoir Committee is formed

- **Released** a Draft EIR/EIS in partnership with the Bureau of Reclamation

**2018:** Sites Reservoir Project was **awarded \$816 million** through Prop 1, the **largest** award

- **Awarded a \$449 million loan** from the U.S. Department of Agriculture's Rural Development program

**2019:** Received **\$10 million** from the Water Infrastructure Improvements for the Nation (WIIN) Act

**2020:** One of only two priority projects listed in the Governor's 2019 Water Resilience Draft Portfolio



# Our Strength is in Our Broad Statewide Participation

## Diverse statewide representation of public agencies advancing Sites Reservoir



Participants include counties, cities, water and irrigation districts

Urban and Rural

Sacramento Valley

San Joaquin Valley

Bay Area

Southern California

# DRAFT Participation Levels



Participant	Phase 2 (2019) Participation Level (Ref, AF)	Participation Level (AF) Staff Recommendation	Variance (AF)	Participation Increase Interest (AF)
Antelope Valley East Kern WA	500	500	0	
Carter Mutual Water Company	300	300	0	
City of American Canyon	4,000	4,000	0	
Coachella Valley Water District	10,000	10,000	0	
Colusa County	10,000	10,000	0	
Colusa County WD**	11,975	11,000	-975	Possibly
Cortina WD	450	450	0	
Davis Water District	2,000	2,000	0	
Dunnigan WD	2,717	2,717	0	
Desert WA	6,500	6,500	0	
Glenn Colusa Irrigation District	5,000	5,000	0	
LaGrande water district	1,000	1,000	0	
Metropolitan Water District of Southern California	50,000	50,000	0	
RD-108	4,000	4,000	0	
San Bernardino Valley Municipal Water District	21,400	21,400	0	
San Geronio Pass Water Agency	14,000	14,000	0	
Santa Clara Valley WD	16,000	16,000	0	
Santa Clarita Valley Water Agency	5,000	5,000	0	5,000
Westside W.D.**	15,000	2,000	-13,000	
Zone 7 Water Agency	10,000	10,000	0	
Wheeler Ridge-Maricopa WSD	3,050	3,050	0	
Pacific Resources MWC*	0	0	0	10,000
<b>Total</b>	<b>192,392</b>	<b>178,417</b>	<b>-13,975</b>	<b>15,000</b>

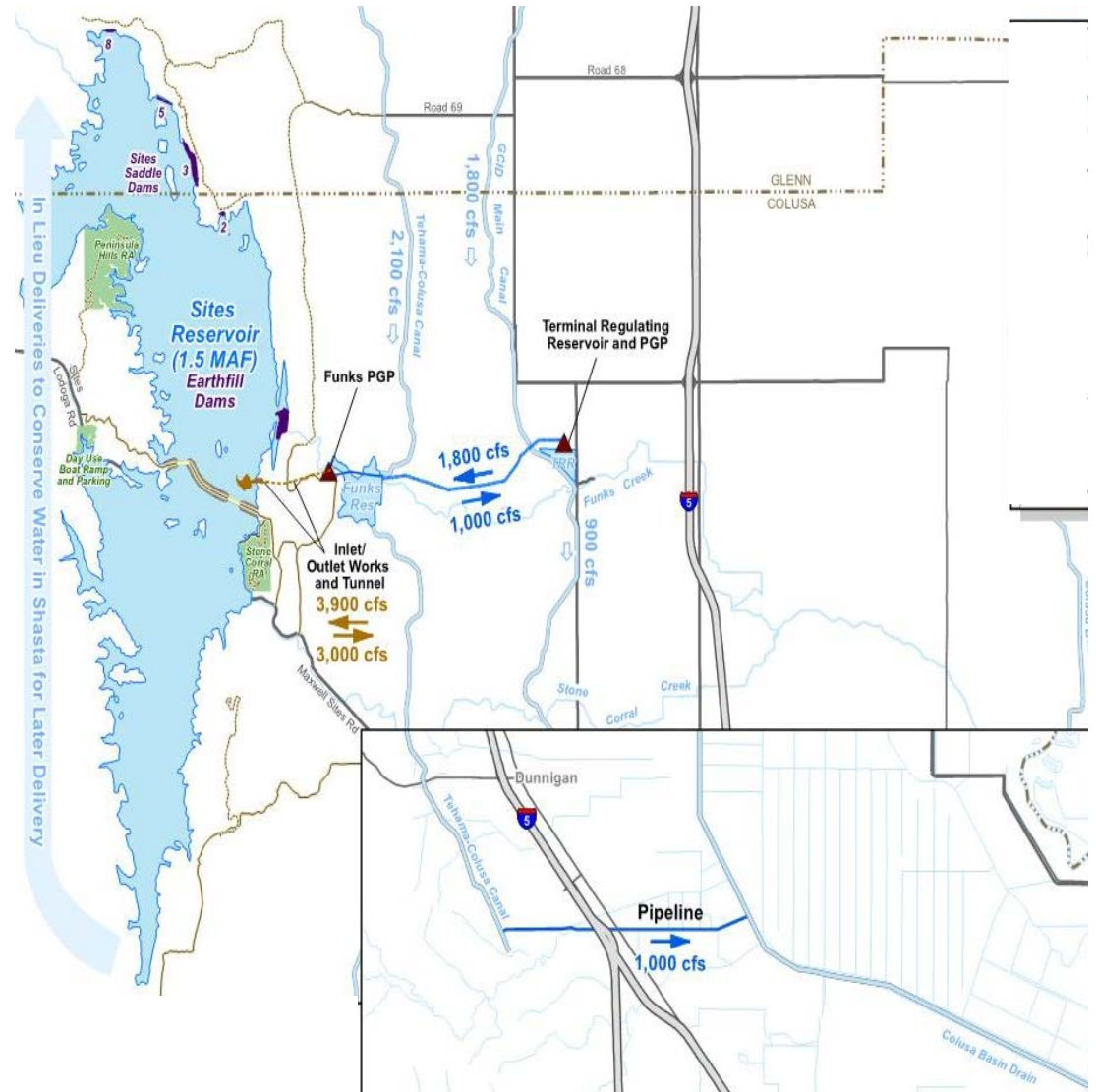
\*Phase 1 participant, no survey response received. Interest expressed by a responding Phase 2 participant.

\*\*Indicated possibility for higher participation, lower projected participation level shown

# Rightsized to Meet Our Current and Future Water Supply Needs

1.5 million acre-feet

Utilizes the existing canals to cut costs





# Rightsized to Meet Our Current and Future Water Supply Needs

Member	Reservoir Participation (AFY)
<b>Public Water Agencies</b>	
North of Delta	52,142
South of Delta	140,750
Subtotal Public Water Agencies	192,892
State of CA	~ 40,000
Total Requirement	~230,000

## Participant Demand

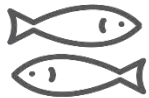
(State of California investment for the environment)

## Release Capacity from Sites

Long term average ~240,000 AFY

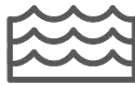
Year Type	1,000 cfs Release Capacity (AFY) to the Colusa Basin Drain
Wet	90 – 120
Above Normal	260 – 290
Below Normal	245 – 275
Dry	355 – 385
Critically Dry	210 – 240

# Provides Multiple Statewide Benefits for Generations to Come



## Off-stream Storage

Does not create a barrier to native fish migration



## Cooperative Operation

Increases effectiveness and efficiency of existing water storage infrastructure



## Recreational Opportunities

Provides northern Sacramento Valley with additional opportunities for recreation



## Federal and State Agencies Manage Environmental Water

Adaptable to current and future conditions and priorities



## Adaptable to Climate Change

Contributes to system reliability and performance with climate change



## Environmental Support

Provides environmental water in drier periods for native fish, and habitat for native species and birds



## Local Leadership and Cooperation

Aligns with Sacramento Valley's values and fosters regional and statewide collaboration



## Dry Year Water Supply

Reliable dry year water supply for California communities, farms and businesses

# Provides Statewide Benefits for Generations to Come

## Water dedicated to environmental use

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A significant portion of the Sites Reservoir Project's annual water supplies will be dedicated to environment uses:

Preserve cold-water pool in Lake Shasta later into the summer months to support salmon development, spawning and rearing

Provide a reliable supply of refuge water to improve Pacific Flyway habitat for migratory birds and other native species

Provide water dedicated to help improve conditions for the Delta Smelt

Managed by state resources agency managers who will decide how, and when, this water would be used - creating a water asset for the state that does not currently exist



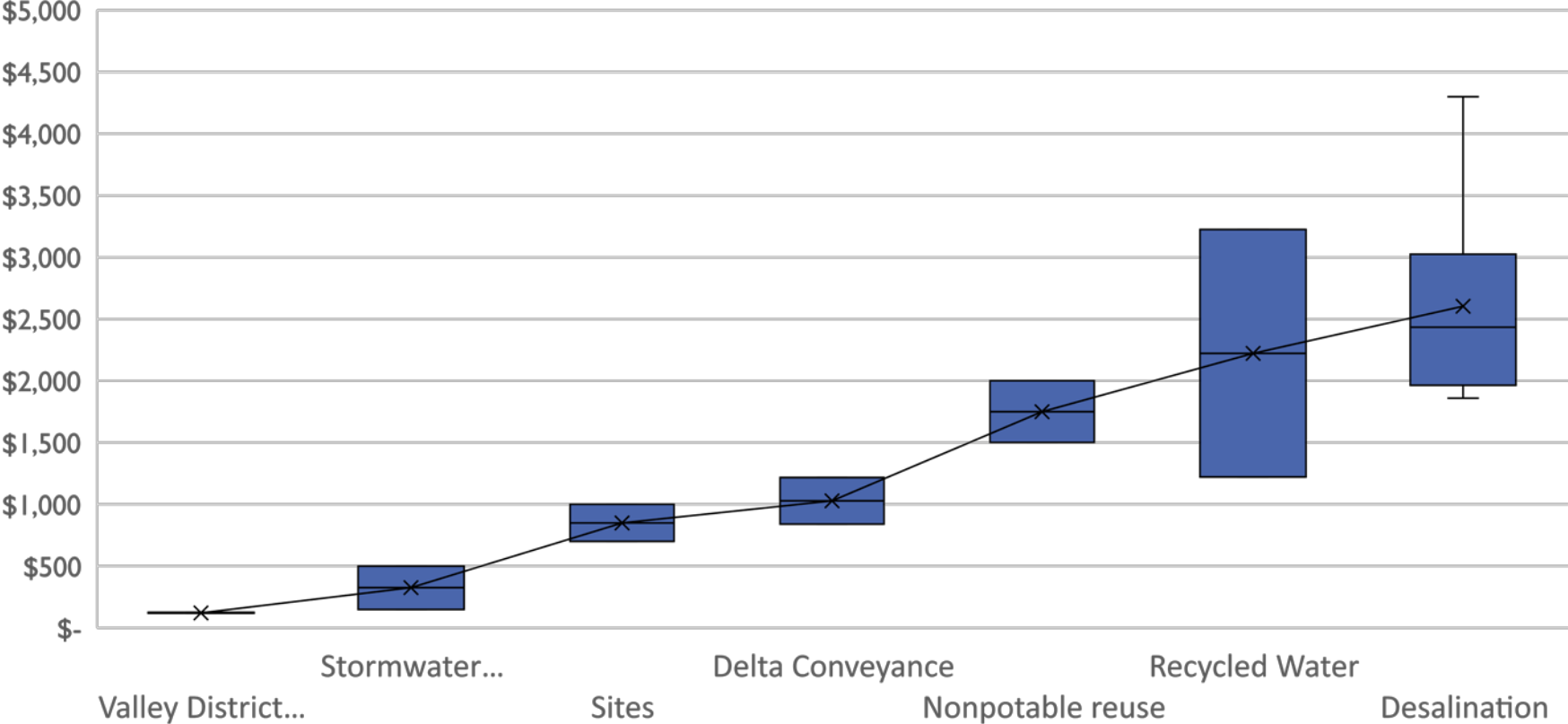
# Rightsized to Meet Our Current and Future Water Supply Needs

**\$2 Billion less** than the 2017 preferred alternative

Reservoir Size (MAF)	1.5
Project Cost (2019\$, billions)	\$2.4 – \$2.7
Contingency Cost (2019\$, billions)	\$0.6
Total Project Cost (2019\$, billions)	\$3.0 – \$3.3
Annualized AF/year release (AFY)	240,000
Range of Annual Costs During Repayment Without WIFIA Loans (2020\$, \$/AF)	\$650 – \$710
Range of Annual Costs During Repayment With WIFIA Loans (2020\$, \$/AF)	\$600 – \$660

(Costs assume bond financing)

# Water Supply Costs, \$/acre-foot



CA Water Fix vs. Alternative Supplies, Metropolitan Water District of Southern California, 8/10/17  
 Executive Summary The Cost of Alternative Water Supply and Efficiency Options in California, Pacific Institute, October 2016

# We are On-Track to Deliver This Vital Project for the People of California

## Amendment to Phase 2 Agreement

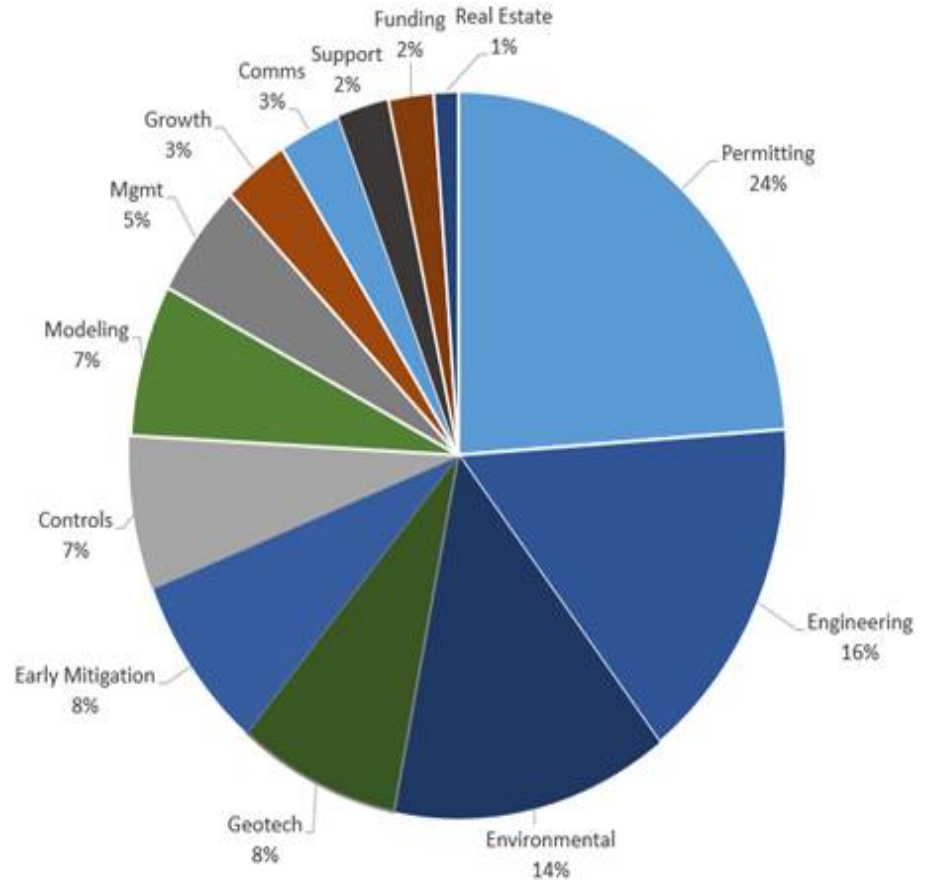
\$100/acre-ft funding request in two installments

### Valley District:

\$60/AF Nov '20: \$1,284,000

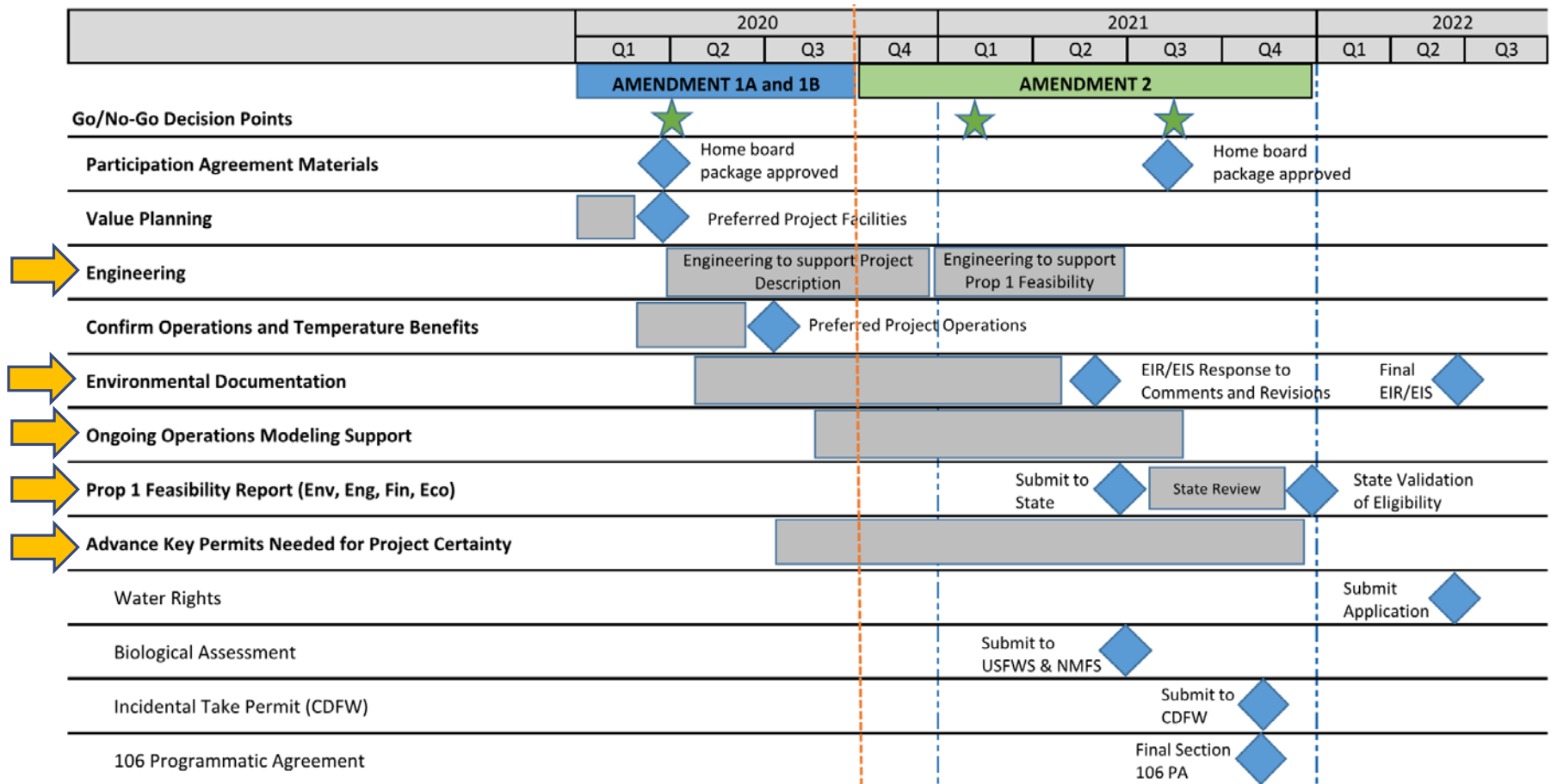
\$40/AF April '21: \$856,000

Total: \$2,140,000



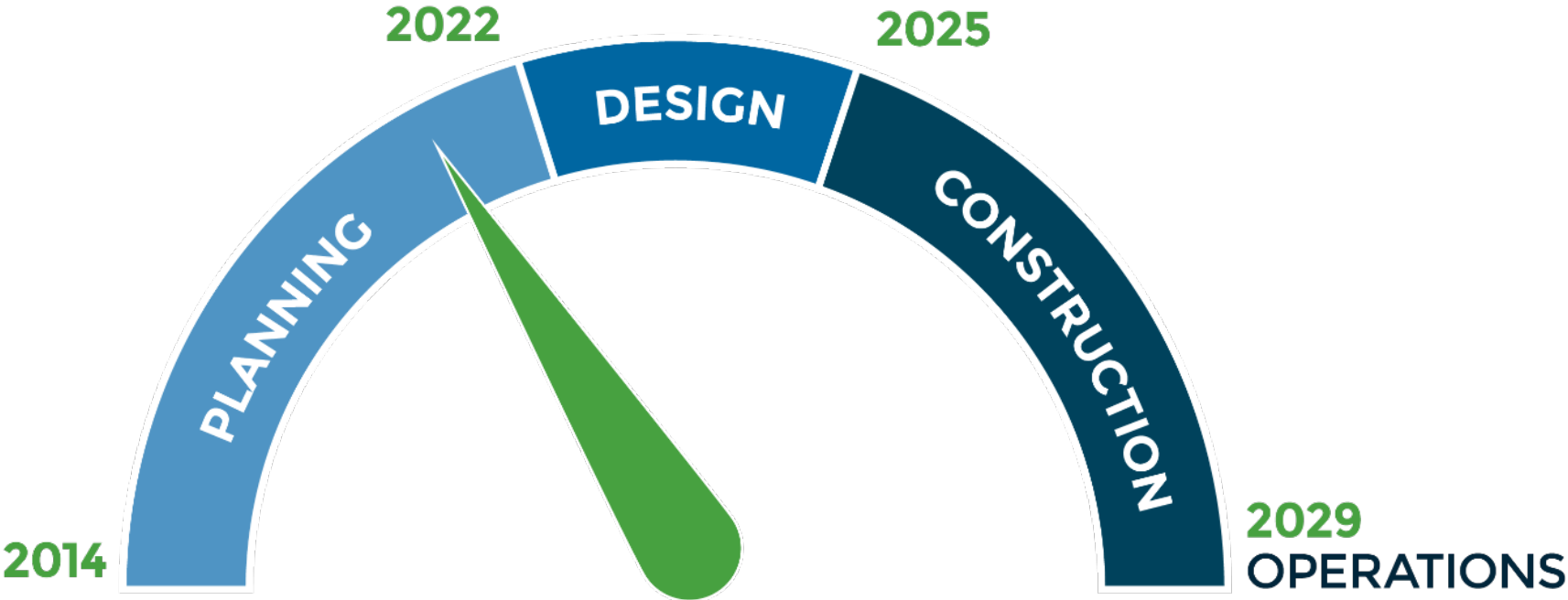
# We are On-Track to Deliver This Vital Project for the People of California

## Contract Amendment Schedule



**NOTE: This graphic includes schedule drivers only and does not include all activities/deliverables. This work plan is based on current participation commitments.**

# Design Starts in 2022!





## Director Comments and Discussion

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**T. Milford  
Harrison**  
President



**Paul  
Kielhold**  
Vice President



**Susan  
Longville**  
Treasurer



**June  
Hayes**  
Director



**Gil  
Navarro**  
Director

### Staff Recommendation

Direct staff to place the Sites Second Amendment to the 2019 Reservoir Project Agreement dated as of April 1, 2019 by and Among Sites Project Authority and the Project Agreement Members Listed Herein, at a total cost to Valley District of \$2,140,000, on an upcoming Board of Directors agenda for consideration.



# Discussion Item 4.3 (Pg. 56)

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**Heather Dyer, MS, MBA** – Chief Executive Officer/General Manager  
**Tim Moore** – Risk Sciences

Presentation and Discussion of the Regional Coordination and Achievement of Common Goals between the San Bernardino Valley Municipal Water District, San Gorgonio Pass Water Agency, and the Yucaipa Valley Water District

## **Staff Recommendation**

Provide direction to staff and consider assignment of an ad-hoc committee to this project.

## Director Comments and Discussion

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**T. Milford  
Harrison**  
President



**Paul  
Kielhold**  
Vice President



**Susan  
Longville**  
Treasurer



**June  
Hayes**  
Director



**Gil  
Navarro**  
Director

### Staff Recommendation

Provide direction to staff and consider assignment of an ad-hoc committee to this project.



# Discussion Item 4.4 (Pg. 71)

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**Kristeen Farlow, MPA** – External Affairs Manager

Consider Participation in Training by Jurassic Parliament

## **Staff Recommendation**

Discuss and provide direction to Staff on next steps.

# Program Overview

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- Parliamentary Procedure and Robert's Rules of Order
- Help run effective and fair meetings
- Pitfalls to avoid as meetings are being run
- Help Board Members be more effective in their role
- In-person and online training available
- Interactive training could be personalized
- Could offer a regional training for others to participate

## Director Comments and Discussion

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**T. Milford  
Harrison**  
President



**Paul  
Kielhold**  
Vice President



**Susan  
Longville**  
Treasurer



**June  
Hayes**  
Director



**Gil  
Navarro**  
Director

### Staff Recommendation

Discuss and provide direction to Staff on next steps.



# Adjournment

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