

# Home Board Presentation

March 2020



# Sites Reservoir Project Overview



- Will utilize surplus flows from the Sacramento River
- Water stored in an Off Stream Sacramento River Storage (1.3 – 1.5 million acre-feet)
- Primary objectives are to improve water supply and reliability for participants and environment
- Secondary objectives provide opportunities for recreation and flood damage reduction



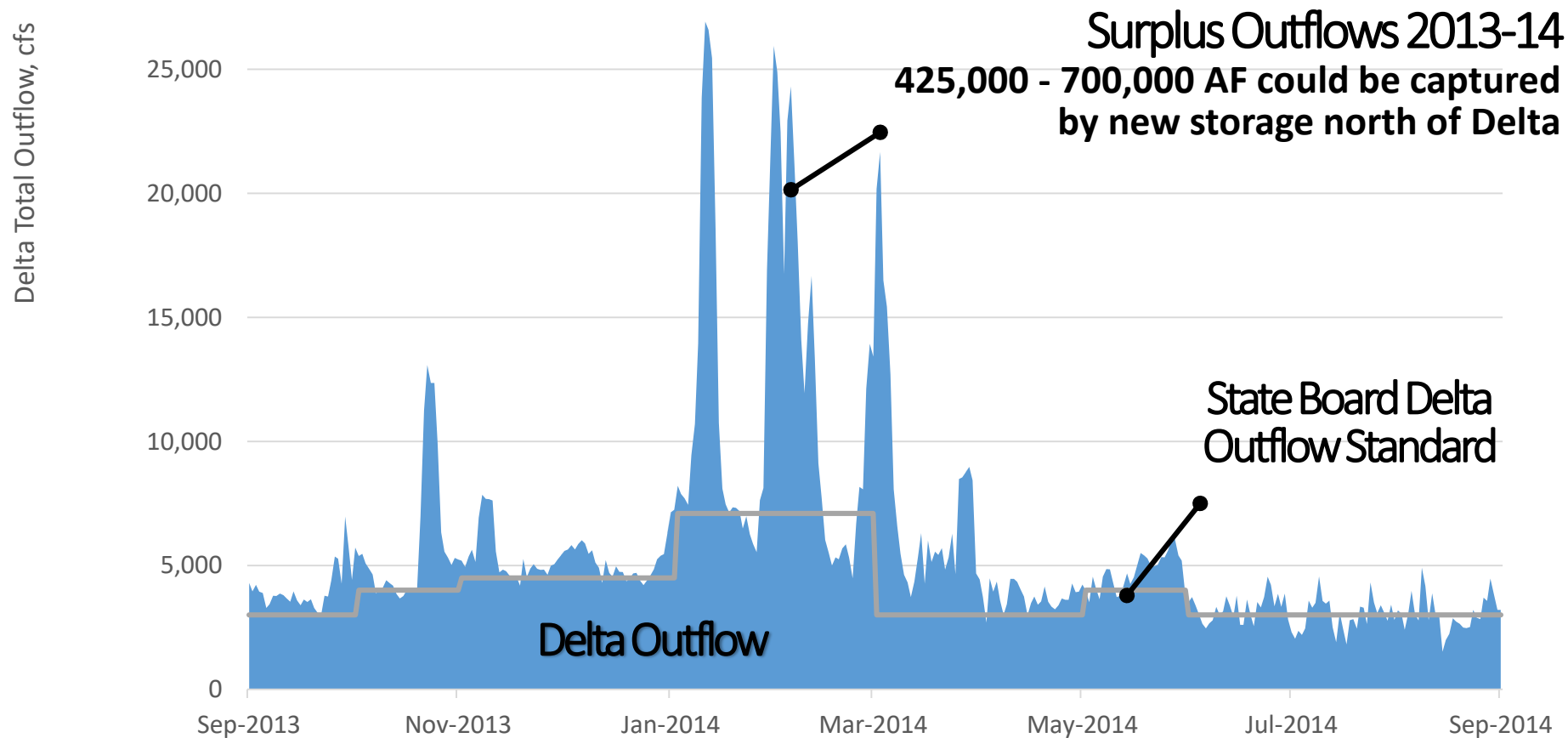
# Sites Reservoir Project Overview



- Reservoir site is largely undeveloped
- Agriculture grazing land is the primary use
- Project will maximize use of existing facilities
  - Tehama Colusa Canal
  - Glen Colusa Canal
  - Red Bluff and GCID intake screens on Sac River
  - Colusa Basin Drain

# Background – Sites Captures Surplus Outflow

## Surplus Outflows Capture Analysis



# Pivotal Benefits of Sites Reservoir



Water from Sites **directly benefits:**

Environment



Communities



Agriculture



Families

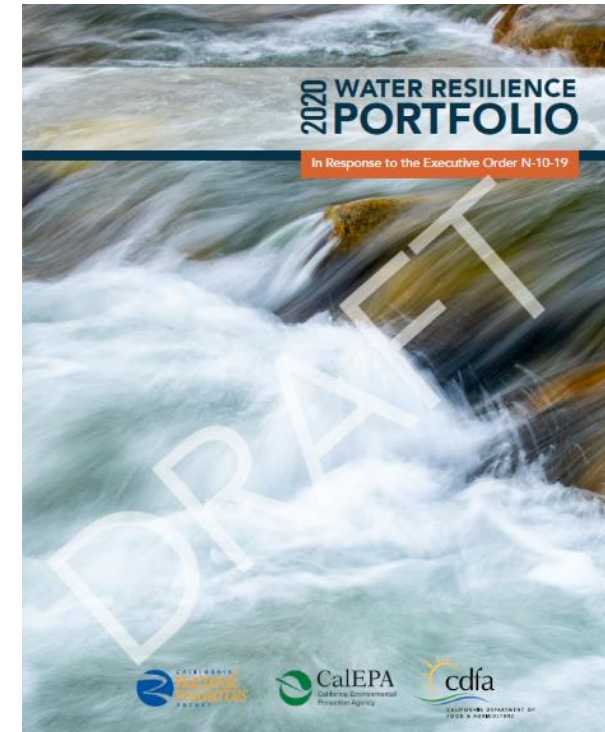


- Increases California water supply resiliency with climate change
- Portion of the storage is dedicated to environmental flow needs
- Enhances ability to capture flood flows for both Northern & Southern California
- Transfers surplus flows to times of low flow when fisheries and water quality need it most
- Provides opportunity for recreation and flood damage reduction



# Key Authority Accomplishments to Date

- Named in Governor's Draft Water Resiliency Portfolio
- Reduced construction cost by over \$2B through value planning process
- Leveraged your investment dollars against other State dollars. For every dollar you invested it is stretched to \$1.50
- Increased certainty of permitting criteria
- Adopted Storage Policy to meet individual investor needs
- Furthered landowner and stakeholder engagement



**Used additional USBR dollars to start geotech exploration**

# Reservoir Configuration Meets Current Participation Demands

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

**28** participants span California



Our participants serve:



Cities/Neighborhoods



Farmland/Irrigation

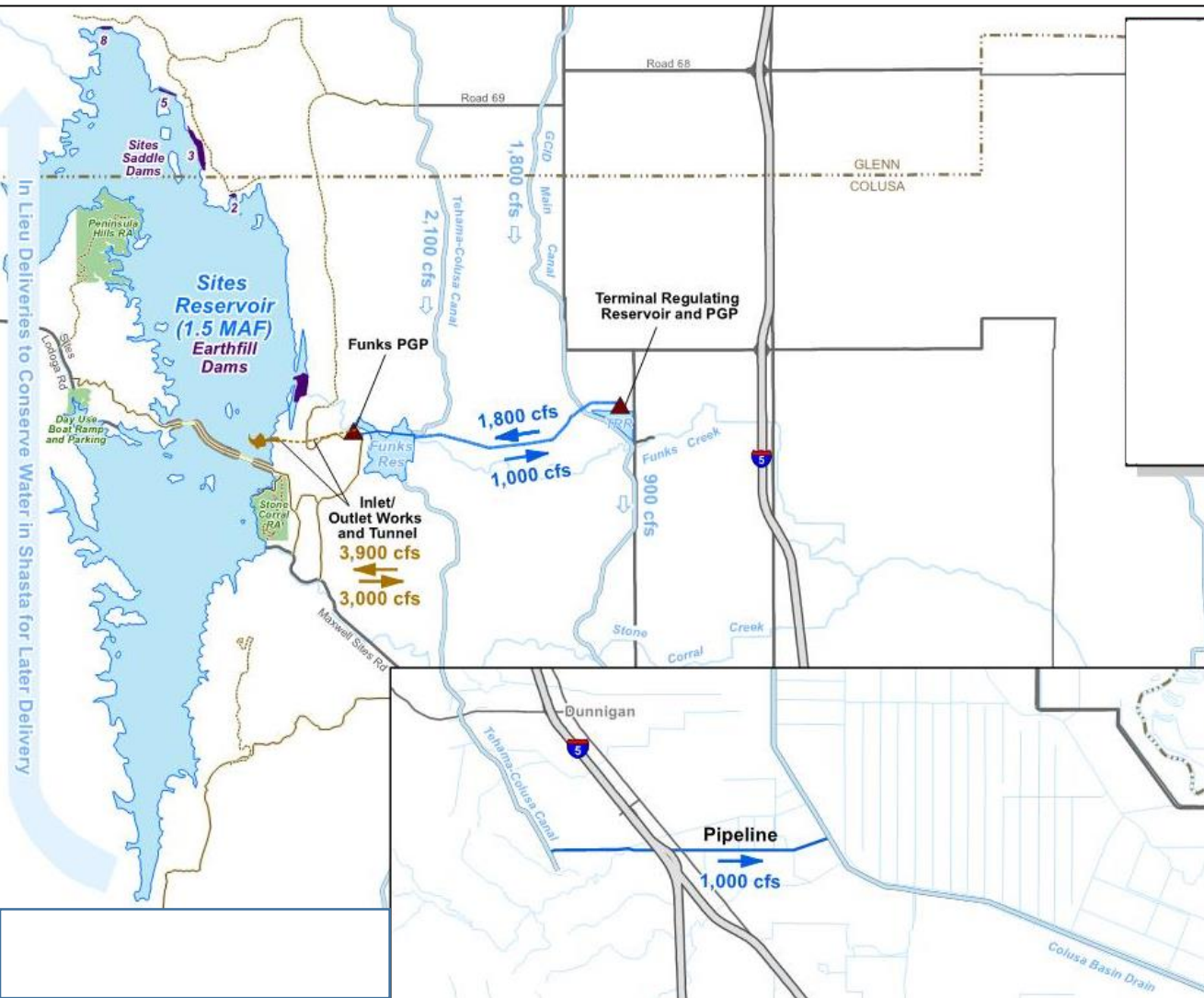


State/Environment

equating to **24+ million people** and **1+ million acres of farmland**

**Plus \$6M from BOR WIIN Act and \$439M USDA Loan**

# Key Features of the Recommended Project



- 1.5 MAF Reservoir
- 1,000 cfs release to Colusa Basin Drain (CBD)
- CBD drains to Sacramento River and Yolo Bypass
- Multi-span Bridge
- South Access Road

**~\$2B in Construction Cost Savings**

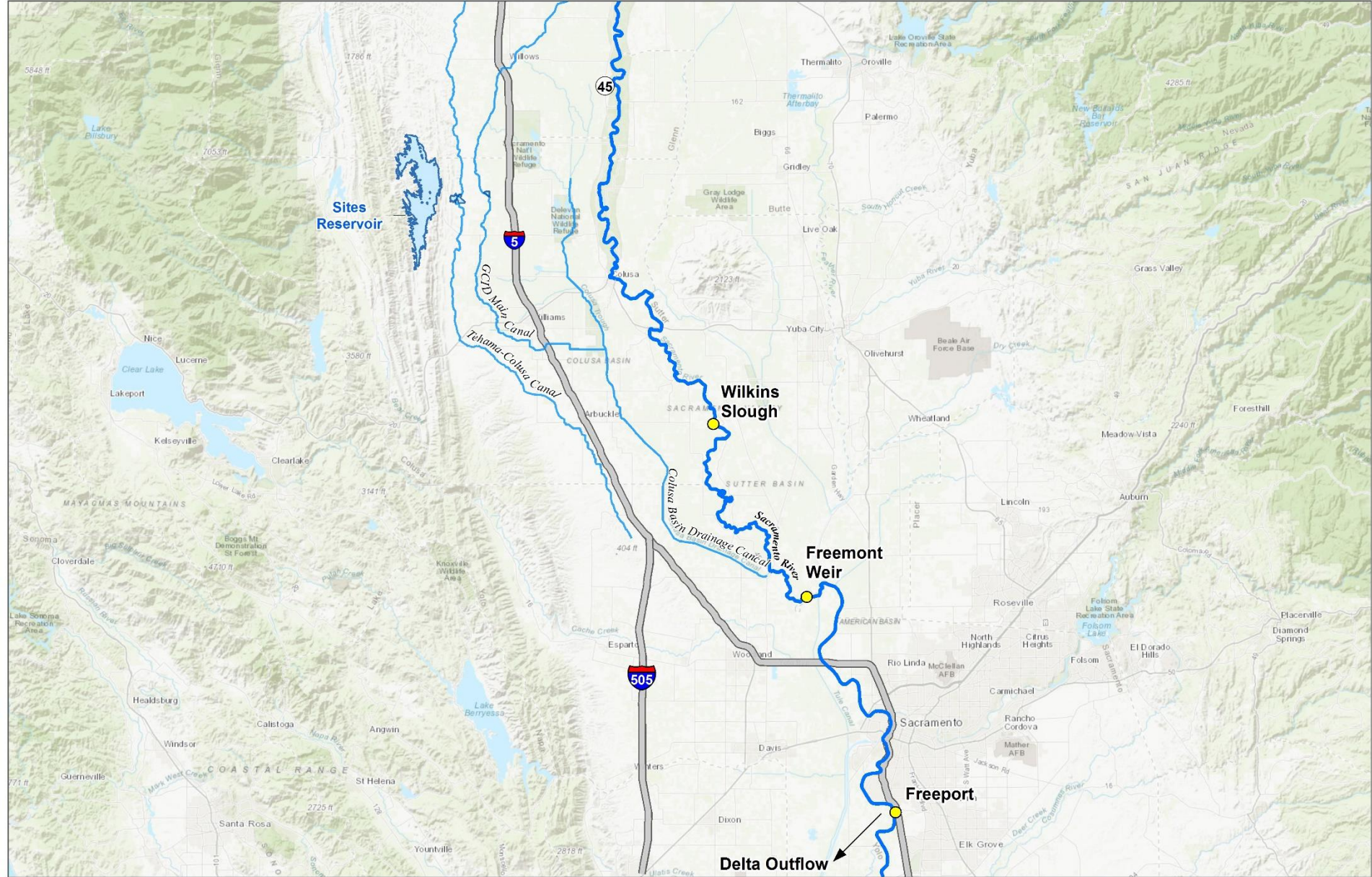


# Environmental Planning & Permitting

	Scenario A	Scenario B	Scenario C
Potential Range of Diversions from the Sacramento River (TAF)	189 – 209	242 – 272	283 – 313
Potential Range of Average Annual Deliveries from Sites (TAF)	175 – 194	225 – 253	264 – 292



# Environmental Compliance Points



# Reservoir Releases



## Release Capacity from Sites Based on Year Type

Year Type	1,000 cfs Release Capacity (TAF)
Wet	116
Above Normal	286
Below Normal	273
Dry	382
Critically Dry	237

Shasta Exchange could increase the yield significantly.

**Long Term Average Annual Yield of 243,000 acre-ft**





# Affordability

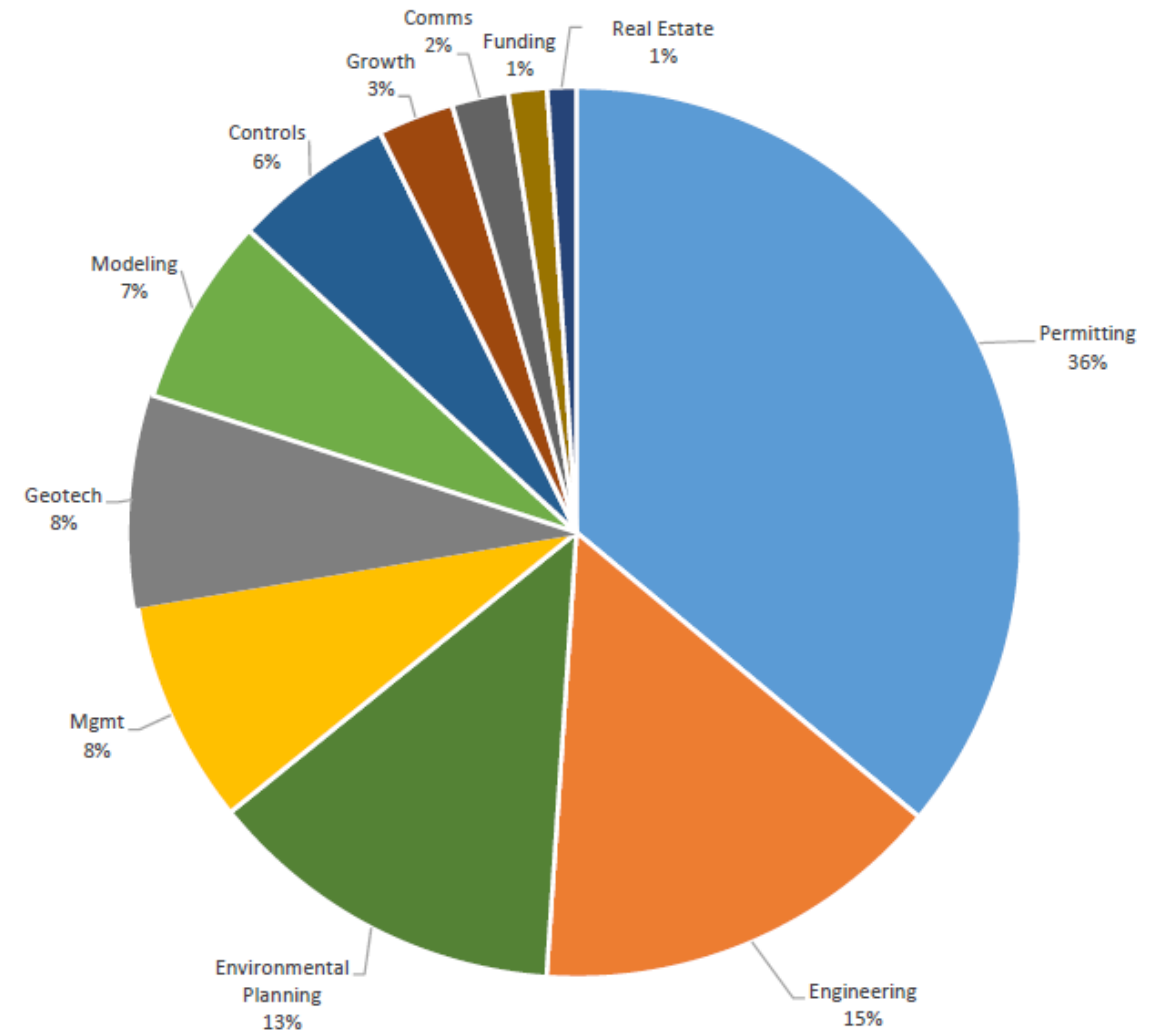
Reservoir Size (MAF)	1.5
Project Cost (2019\$, billions)	\$3.0
Annualized AF/year Release (TAF)	243
Range of Annual Costs During Repayment Without WIFIA Loan (2020\$, \$/AF)	\$650 - \$710
Range of Annual Costs During Repayment With WIFIA Loan (2020\$, \$/AF)	\$600 - \$660

**Beneficiary Pays Policy would lower costs to Sac Valley Investors**



# Next Steps for 2020/2021

- Operations CVP/SWP Exchange Refinements
- Advancing Permitting Certainty
- Recirculation of Draft EIR/EIS
- Complete Feasibility Study
- Administer State and Federal Grants
- Continue to strengthen community and landowner relationships
- Develop Plan to advance the project past 2021



**\$100/acre-ft cash call takes us to the end of 2021**

# Planned Environmental Planning Accomplishments at End of 2021



- Finalization of the EIR/EIS Project Description Chapter, both construction and operations/maintenance of the project and alternatives
- Desk top research to update environmental baseline, where appropriate, to better support analysis and the administrative record
- Continued outreach to Landowners, Agencies, NGOs, Tribes, and other stakeholders to minimize risk of extensive comments later
- Prepare and circulate a revised Draft EIR/EIS
- Review, categorize and draft initial responses to comments received on the recirculated Draft EIR/EIS
- Prepare and submit an Environmental Summary Report to support CWC feasibility determination



**We will be very close to having a final EIR/EIS**



# Planned Permitting Accomplishments at End of 2021

- Permits for Geotechnical exploration
- Section 401 permit application
- Section 106 Action Plan
- Water Rights application
- Updated BA and BO
- CESA Section 2081 application submitted
- Agreement on approach for 404.408 and streambed alteration agreement

**We will have greater permitting certainty**



# Planned Engineering Accomplishments at End of 2021



- Final Feasibility Report
- DSOD buy-in on our approach
- Collecting more geotech data
- Geotech investigation plan for the entire project
- Updated cost estimate

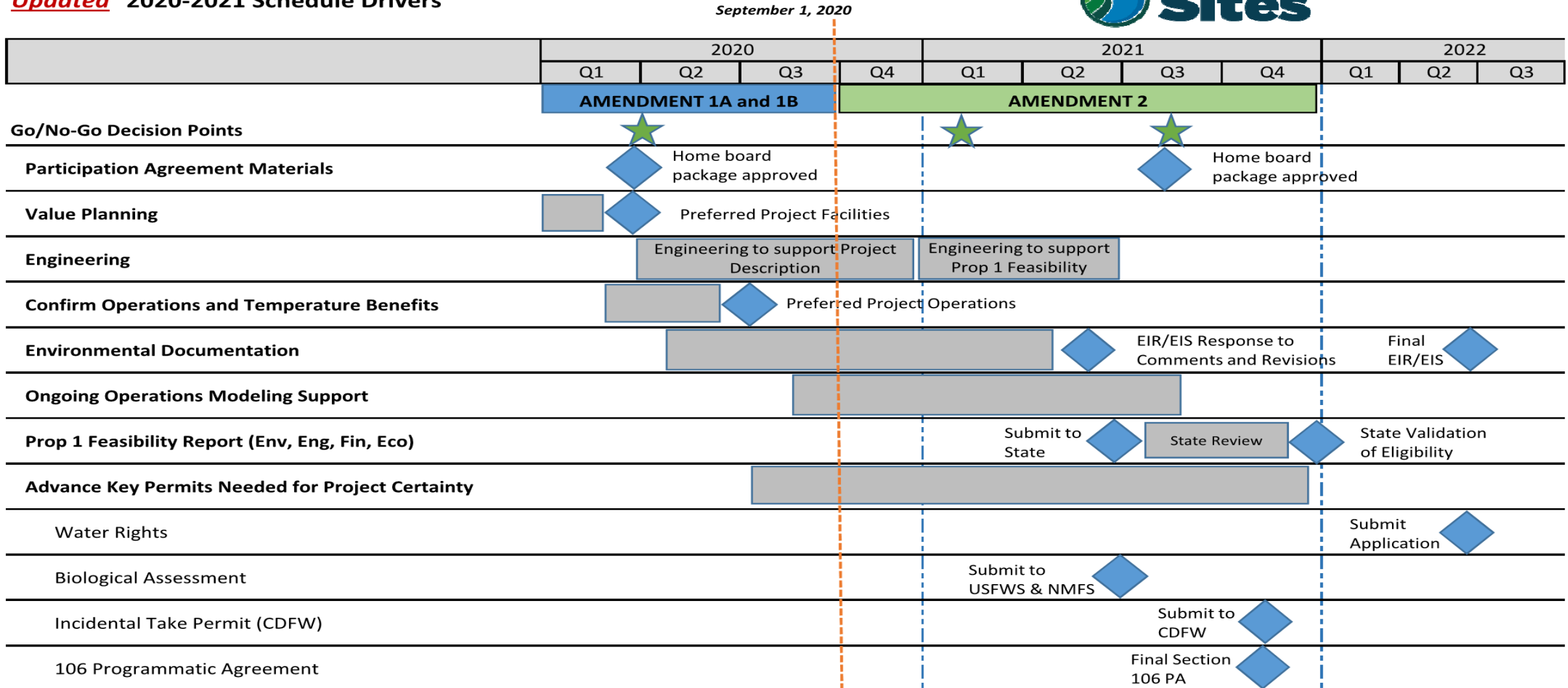


We have already started collecting geotech data using BOR's money

**We will be ready to launch into full design at the start of 2022**

# Amendment 2 High Level Schedule

Sites Reservoir Program  
Updated 2020-2021 Schedule Drivers



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



# Key Accomplishments at end of 2021

- Meet eligibility requirements under Prop 1 (WSIP) in order to access \$XXX M
- Draft EIR/EIS with responses to comments
- Feasibility Report
- Greater environmental permit certainty and draft permit applications
- Updated and refined cost estimate and affordability analysis
- Adopted Storage Policy that can be used to meet individual investor needs
- Better definition of SWP/CVP (Shasta) exchange, including Operations Plan
- Stronger landowner and stakeholder engagement

