Sites Reservoir

Sites

21st 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** to our statewide water supply






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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

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Our Strength is in Our Broad Statewide Participation

Sacramento Valley

Carter Mutual Water Company
City of American Canyon
Colusa County
Colusa County Water Agency
Cortina Water District
Davis Water District
Dunnigan Water District
Glenn County
Glenn-Colusa Irrigation District
LaGrande Water District
Placer County Water Agency
Reclamation District 108
City of Roseville
Sacramento County Water Agency
City of Sacramento
Tehama-Colusa Canal Authority
Westside Water District
Western Canal Water District

Bay Area

Santa Clara Valley Water District
Zone 7 Water Agency

San Joaquin Valley

Wheeler Ridge-Maricopa Water Storage District

Southern California

Antelope Valley – East Kern Water Agency
Coachella Valley Water District
Desert Water Agency
Metropolitan Water District
San Bernardino Valley Municipal Water District
San Gorgonio Pass Water Agency
Santa Clarita Valley Water Agency

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Rightsized to Meet Our Current and Future Water Supply Needs

Sites Reservoir has been designed and optimized to meet our water supply needs for today and in the future

The Sites Project Authority conducted a **rigorous Value Planning effort** to review the project's proposed operations and facilities **to develop a project that is "right sized" for our investors and participants** while still providing water supply reliability and enhancing the environment

Rightsizing the reservoir was **responsive to input** from **state and federal agencies, NGOs, elected officials, landowners and local communities**

The **feedback we received** through a robust outreach effort was **critical** to developing a reservoir that is the **right size for both people and the environment**

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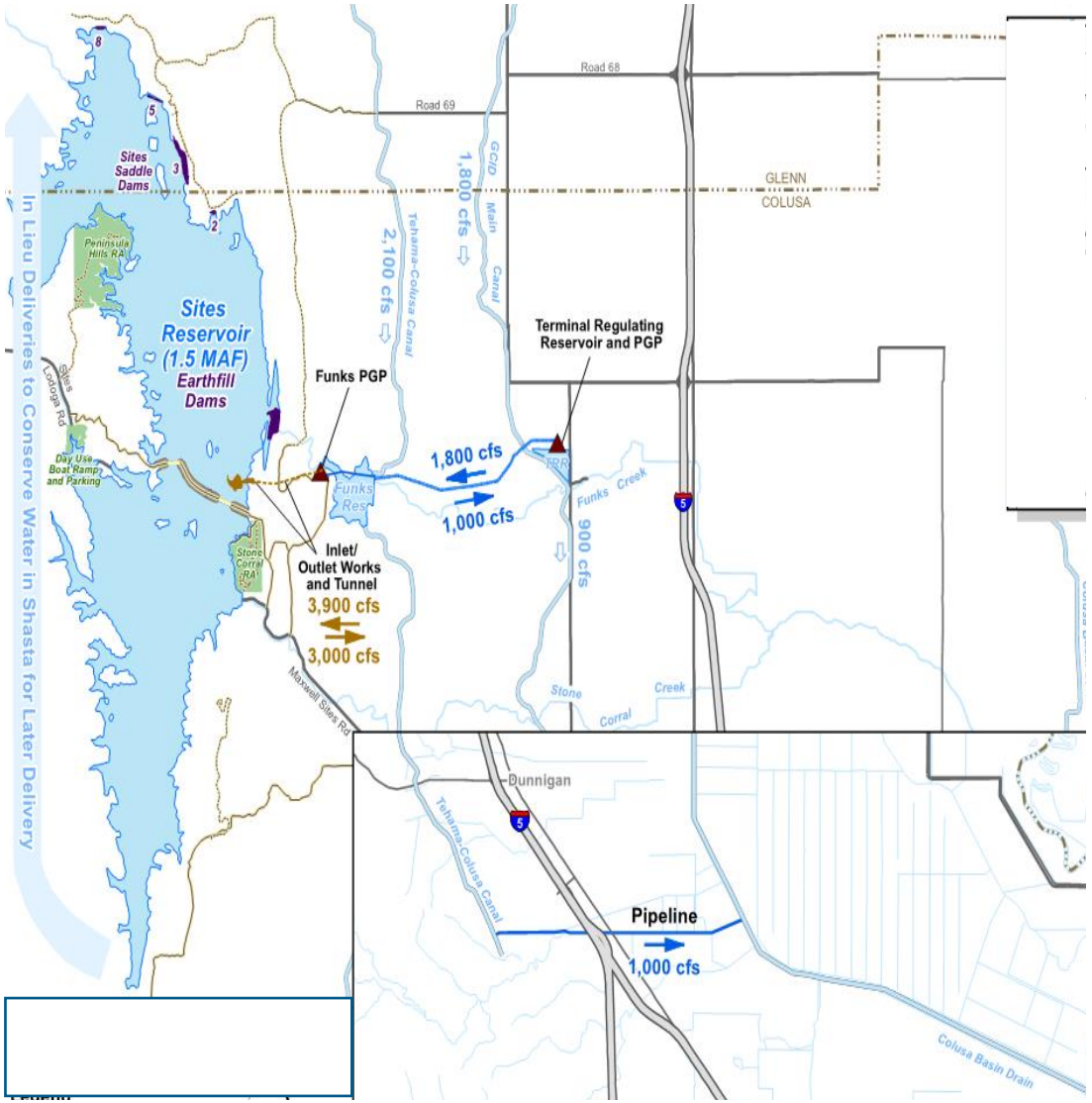
Rightsized to Meet Our Current and Future Water Supply Needs

1.5 million acre-feet

Utilizes the existing **Glenn-Colusa Irrigation District** and **Tehama-Colusa Canal Authority** canals to convey water to Sites Reservoir from the Sacramento River

Delivers water back to the Sacramento River through the **Tehama-Colusa Canal** and through the **Colusa Basin Drain** for participant deliveries and for the environment



Rightsized to Meet Our Current and Future Water Supply Needs

Member	Reservoir Participation(AFY)
Public Water Agencies	
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

Participant water subscriptions allocated in the **current participation agreement**

Allocation of State of California water subscription is based on the **Proposition 1 water investment**

- Water for Delta Smelt
- Water for Refuges

Release Capacity from Sites

The "rightsized" project can deliver water to meet the demands of our participants and California's investment of water for the environment

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

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Assumed Diversion and Operations Criteria

Location	Criteria
Wilkins Slough Bypass Flow	8,000 cfs April/May 5,000 cfs all other times
Fremont Weir Notch	Prioritize the Fremont Weir Notch, Yolo Bypass preferred alternative, flow over weir within 5%
Flows into the Sutter Bypass System	No restriction due to flow over Moulton, Colusa, and Tisdale Weirs
Freeport Bypass Flow	Modeled WaterFix Criteria (applied on a daily basis) Post-Pulse Protection (applied on a moving 7-day average) Post-Pulse (3 levels) = January–March Level 2 starts January 1 Level 1 is initiated by the pulse trigger
Net Delta Outflow Index (NDOI) Prior to Project Diversions	44,500 cfs between March 1 and May 31

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Assumed Release Criteria

Most releases occur in dry years for water supply and environmental benefits

Priority of releases assume the following:

- Provide water to project participants north and south of the delta
- Provide water to Cache Slough area via Yolo bypass
- Provide water for incremental Level 4 refuge deliveries
- Support Reclamation goals through exchanges

Deliveries to SWP contractors supplement Table A (start @ 85% allocation and more aggressive releases starting @ 65%)

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Rightsized to Meet Our Current and Future Water Supply Needs

The Value Planning process has **resulted** in a project that has **a smaller footprint** and **operated in a different manner** then originally designed

Due to these changes the Authority will **revise and recirculate its Draft EIR**

Work with **landowners, tribes, stakeholders, NGOs, and local communities** to develop a **collaborative environmental review process**

It is essential that we **build a project now that makes sense for all our participants** – local, state, and federal

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Rightsized to Meet Our Current and Future Water Supply Needs

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 - $3.3
Annualized AFY release	240,000
Range of Annual Costs During Repayment Without WIFIA Loans (2020$, $/AF)	$650 - $710
Range of Annual Costs During Repayment With WIFIA Loans (2020$, $/AF)	$600 - $660

The rightsized project is **roughly $2 Billion less** then the 2017 preferred alternative

Cost savings primarily from the **removal** of the **Delevan Diversion** facility on the Sacramento River and the **Delevan Pipeline**

Lowered the Annual Cost during repayment ($/AF)

Significant savings to participants with finance through a **WIFIA** government backed loan

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Provides Statewide Benefits for Generations to Come

Sites Reservoir provides many multi-layered benefits

Off-stream Storage

Does not create a barrier to native fish migration

Federal and State Agencies Manage Environmental Water

Adaptable to current and future conditions and priorities

Local Leadership and Cooperation

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

Cooperative Operation

Increases effectiveness and efficiency of existing water storage infrastructure

Adaptable to Climate Change

Contributes to system reliability and performance with climate change

Dry Year Water Supply

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

Recreational Opportunities

Provides northern Sacramento Valley with additional opportunities for recreation

Environmental Support

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

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Provides Statewide Benefits for Generations to Come

Sites Reservoir provides water dedicated to environmental use

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**

Water dedicated for the environment provided by Sites Reservoir will be **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**

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Possibilities of Environmental Water Uses

Member	Reservoir Participation(AFY)
Public Water Agencies	
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Potential Beneficiary
Level 4 refuge water
Enhanced Delta Ecosystem
Improve Survival of Anadromous Fish

Sites **creates a resource that can be managed for the benefit of the species.**

Water for the environment is **managed by state resource agencies.**

There is **flexibility** to manage these benefits each year.

The range of possibilities will be covered in the recirculated Draft EIR.

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Provides Statewide Benefits for Generations to Come

Sites Reservoir provides regional flood protection benefits

Provides significant **regional flood protection benefits** for the Sacramento Valley

Will capture and store **flood flows** that would normally impact the community of **Maxwell** - protecting homes, business and farms

Will help to **limit "down stream" flooding issues** by capturing storm flows that sometimes overwhelm the regions flood control facilities

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Provides Statewide Benefits for Generations to Come

Sites Reservoir will benefit the local and regional economy

Create hundreds of construction-related jobs during each year of the construction period, and **long-term jobs related to operations**

Creates **new recreation opportunities** in the Sacramento Valley which adds to the **region's economy**

Adding **resiliency** to the water supply will **strengthen the statewide economy** and **business** that rely on a reliable source of water for their operations – particularly agriculture

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

Key Milestones Through 2021

Meet **eligibility requirements under Prop 1 (WSIP)** in order to access the remainder of the $816 Million in funding

Recirculate Draft EIR for public comment, proactively engage stakeholders, develop responses to comments to support environmental feasibility determination

Complete Feasibility Report

Secure environmental permit certainty and **draft permit applications**

Update and **refine cost estimate** and **affordability analysis**

Develop Plan of Finance

Improve definition of **SWP/CVP** exchange, including **Operations Plan**

Enhance landowner, stakeholder & NGO engagement

Develop Operating Agreement Term Sheets with: DWR, USBR, TCCA, GCID, CBD Authority

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Questions