

Water Storage Investment Program

Sites Project Supplemental Funding Determination

Introduction

The Sites Project Authority (Authority) is developing the Sites Project in Northern California, north of Sacramento. The Sites Project is one of five projects within the Commission’s Water Storage Investment Program (WSIP). The total capital cost of the Sites Project is between 6.2 and 6.8 billion dollars.

The Sites Project will create a 1.5-million acre-foot (MAF) off-stream water storage facility in Glenn and Colusa Counties. This storage facility will capture and store excess stormwater flows from the Sacramento River system for later use by storage partners, including federal, State, and local agencies from across the state. The project will provide ecosystem improvements by delivering water to wildlife refuges north and south of the Sacramento-San Joaquin Delta (Delta). The project will also provide recreation and flood control benefits. The State, through WSIP, is investing in the ecosystem, recreation, and flood control benefits provided by the project. The Authority has requested to add emergency response as a public benefit.

The Commission modified the WSIP regulations in 2025 to allow for supplemental funding determinations.¹ Consistent with the WSIP language in Proposition 4, the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 (Proposition 4), the Commission may make a supplemental funding determination to current WSIP projects on a case-by-case basis to cover the costs of inflationary increases and/or additional public benefits if uncommitted funds are available. Currently, there are \$587,443,747 available in uncommitted funds. The Commission may consider supplemental funding determinations before or after a final funding decision has been made, but not before draft contracts for the administration of public benefits (CAPBs) are made available. The Authority provided a letter on May 15, 2026, requesting an evaluation of additional inflationary increases and the additional emergency response benefit.

This staff report presents information about the status of the Sites Project, inflation increases since the Commission’s original consideration of the project, a description of the proposed emergency response benefit, changes to the ecosystem benefit, and staff

¹ 23 Cal. Code Regs. § 6020 (2025).

analysis and a recommendation regarding the Commission’s options for a supplemental funding determination.

Staff recommends adjusting the conditional amount available for the Project by providing a supplemental funding determination for the new emergency response benefit, and inflationary increases which include adjustments to the water values for the Project.

History of Maximum Conditional Eligibility Determination

The Sites Project received a Maximum Conditional Eligibility Determination (MCED), which is the amount of WSIP funding available to a given project, in 2018. Since that time, three projects have withdrawn from the WSIP. In 2021, 2022, and 2025 the Commission provided pro rata inflationary increases to the Sites Project as well as a “Rank 3” adjustment in 2022. Table 1 shows the conditional funding history for the Sites Project.

Table 1: Sites Project Funding History

2018 MCED	2021 MCED Inflation Adjustment	2022 MCED Inflation & Rank 3 Adjustment	2025 MCED Inflation Adjustment	Early Funding (included in MCED)
\$816,377,686	\$836,787,128	\$875,396,369	\$1,094,373,507	\$54,718,675

Calculating Inflationary Increases and Adjusting Water Values

The WSIP projects’ original MCEDs were based on cost estimates in 2015 dollars. The Commission recognizes that WSIP project costs have increased since the original MCEDs were made and that the costs to provide the public benefits also increased.

To calculate the rate of inflation, a composite construction and land cost index² based on published Bureau of Reclamation’s Construction Cost Trends³ is used. This is referred to as the Reclamation Construction Cost Index or RCCI. The RCCI was used to substantiate pro-rata increases to MCEDs in the past. This index is water project-specific and is therefore an appropriate approach to escalate the value of public benefits associated with water projects. As of April 2026, this index gives a 66.7% inflation factor since the original MCED (in 2015 dollars) was determined in 2018.

² Two specific indices published in Reclamation Construction Cost Trends were used to create the index: the composite construction weighted at 65 percent and land cost weighted at 35 percent.

³ Source: <https://www.usbr.gov/tsc/techreferences/mands/cct.html>

The MCED was based, in part, on unit values for water established by the WSIP Technical Reference⁴ and then adjusted based on updated drought information in 2023. The unit values have since been adjusted for inflation to the April 2026 RCCI (Table 2). These unit values were used to calculate the value of the ecosystem and emergency response benefits.

Table 2. Unit Values for WSIP with Inflation to April 2026 and with Dry and Critical Year Adjustments

2030 in Dollars per Acre-foot (AF), 2026 Dollars				
	North-of-Delta	Delta Export	Eastside	Friant
Wet	\$41	\$340	\$177	\$334
Above N	\$318	\$426	\$222	\$418
Below N	\$426	\$445	\$315	\$435
Dry	\$518	\$648	\$335	\$463
Critical	\$958	\$1,198	\$625	\$540
2045 in Dollars per Acre-foot (AF), 2026 Dollars				
	North-of-Delta	Delta Export	Eastside	Friant
Wet	\$250	\$690	\$516	\$427
Above N	\$330	\$865	\$647	\$535
Below N	\$844	\$1,055	\$729	\$801
Dry	\$899	\$1,124	\$777	\$853
Critical	\$1,408	\$1,760	\$1,214	\$1,842

New Emergency Response Public Benefit

The California Department of Water Resources (DWR) is responsible for administering emergency response benefits provided by WSIP projects. WSIP regulation section 6020(b) allows the Commission to consider supplemental funding for current projects that have additional public benefits that were not previously included in the application. The

⁴ 2017 WSIP Technical Reference Appendix D

Commission may consider supplemental funding at or after the time the administering agency submits the draft CAPB to the Commission. DWR accepted emergency response information provided by the Authority and developed a draft CAPB for provision of the emergency response benefit. Key provisions in the draft CAPB for quantifying the benefit are as follows and are summarized in Table 3.

- The term of the benefit is 35 years, beginning one year following the first year of operation.
- The expected number of qualifying events is six years that meet the drought emergency criteria during the 35-year contract.
- Average drought emergency delivery during a qualifying event is 34,800 acre-feet (AF), for a total expected amount of $(34,800 \times 6 =) 208,800$ AF during the contract.

Table 3. Summary of Drought Emergency Deliveries Included in the Emergency Response Draft CAPB

Term of Emergency Response Benefit (Years)	Number of Qualifying Emergency Events During 35-year Term	Average Emergency Delivery Per Event (AF)	Total AF over Term (35 years)
35	6	34,800	208,800

The Authority provided operations modeling (using CalSim 3) that incorporated the Water Board’s draft water rights decision and its deliveries for all public benefits, including emergency response deliveries. DWR staff reviewed the physical emergency response benefits described above and supported by the Authority’s CalSim 3 operations analysis. CWC economists monetized emergency response benefits for the Sites Project using updated unit water values, based on the alternative cost of providing the water from another source.

Benefits are calculated using the deliveries shown in Table 3 and are based on unit values for Delta Export critical year deliveries. These unit values for Delta Export area critical year delivery are \$1,198 per AF in 2030 and \$1,760 per AF in 2045, with unit values in the intervening years calculated by interpolation. All benefits and unit values are in April 2026 dollars.

Based on this information, the present value of this emergency response benefit is \$199,280,579.

Revised Ecosystem Benefit

The Sites Project will provide wildlife refuge water supplies as its ecosystem benefit. Refuge water supplies based on the draft CAPB are shown in Table 4 below. The NOD and south-of-Delta (SOD) deliveries are shown separately. The water year type frequencies indicate the expected number of years to have the given water year type.

Table 4. Sites Reservoir Refuge Water Deliveries, Thousand Acre-Feet (TAF) per year, by Year Type based on the Sacramento Valley Water Year Index

2030 and 2045 Year Types	NOD Deliveries	SOD Deliveries	Year Frequency
Wet	2.0	16.0	26.0%
Above normal	19.9	25.4	14.0%
Below normal	14.0	26.1	15.0%
Dry	18.2	32.8	26.0%
Critical	10.3	16.8	19.0%

In the draft CAPB, a seventy-year contract would begin in 2027 but water deliveries would be provided starting in 2038 after the construction of the reservoir. The benefits will be provided for sixty years or until the cumulative volume of water delivery has been achieved, whichever occurs first. The Sites Project is expected to provide a cumulative volume of 1,356,000 acre-feet SOD and 684,000 acre-feet NOD.

Valuation of these supplies is based on the unit values in Table 2, plus appropriate conveyance costs. Benefits of the refuge supplies are calculated at the refuge destination. Benefits and costs include conveyance costs which are to be paid by the Authority. The following destinations and applicable conveyance costs per AF are incorporated in the benefit calculations:

1. North of Delta, local conveyance on the Westside of the Sacramento River, \$30/AF.
2. For Upper Butte Basin supplies, local conveyance costs will be paid to Richvale / Western Canal Water District, (\$25/AF), plus an additional local conveyance cost of \$30/AF.
3. South of delta local conveyance charges, \$30/AF.
4. South of delta SWP conveyance power cost, about \$20/AF.

The present value of ecosystem benefits is \$806,443,952. In this calculation, refuge supplies would be provided beginning in 2038, consistent with the terms of the draft CAPB for ecosystem benefits.

Flood Damage Reduction Benefit Update for Inflation

The original present value flood damage reduction benefit used for the 2018 MCED was \$44.64 million over the project life, which, at that time, was expected to be almost 100 years. No change to the physical flood damage reduction benefit has been proposed, though the CAPB sets a benefit duration of 75 years. With the RCCI inflation of 66.7% from 2015 to April 2026, the present value of the benefit for 75 years is \$66,518,546.

Recreation Benefit Updated for Inflation

The original present value recreation benefit used for the 2018 MCED was \$197.21 million over the project life, which, at that time, was expected to be almost 100 years. This benefit was based on an annual average of 186,829 user-days of which one-quarter would be transfers from other reservoirs and therefore not counted. The average value per day of recreation was \$49.96. No change to the physical recreation benefit has been proposed, though the CAPB sets a benefit duration of 75 years with an initial ramp-up period to full benefits by 2038. With the RCCI inflation of 66.7% from 2015 to 2026, the present value of the benefit for 75 years is \$291,034,473.

Staff Analysis and Recommendation

Changes to the Sites Project

WSIP regulation section 6020(b)(1) directs the Commission to consider any changes that have occurred to the project since the MCED was made, including but not limited to the availability of additional public benefits and increases in costs due to inflation. Since the MCED was made in 2018, the Sites Project has undergone a “right-sizing” which reduced the size of the reservoir, reduced costs and reduced environmental impacts and benefits. The reduced size of the project was evaluated by CWC staff during the feasibility review and the Commission made a finding of feasibility at its December 2021 meeting. The Project previously had two ecosystem benefits: refuge water supply and Yolo Bypass flows for Delta ecosystem enhancement. At the July 2025 meeting, staff from CDFW discussed Sites’ Yolo Bypass benefit and explained that the benefit was no longer considered viable. The Yolo Bypass benefit has been removed from the project, and the Authority has since worked with CDFW to ensure that refuge supply benefits continue as the ecosystem benefit for the Project. The Authority added an emergency response benefit under drought conditions, which DWR has agreed to accept and included in its draft CAPB. Additionally, as described in this report, there have been increases in inflation that have affected the project.

Project Progress in Meeting WSIP Requirements

WSIP regulation section 6020(b)(2) directs the Commission to consider a project's progress in meeting the requirements of section 6013(c) and the ability of the collective suite of projects to advance the WSIP goals and purposes described in Water Code, section 79750(b).

The Authority is scheduled to bring the Sites Project to the Commission for final funding in December 2026. The project has completed environmental documentation, has applied for all permits needed to begin construction, and several permits are already in-hand. However, some permits and agreements are still outstanding, including a final Water Right decision from the State Water Resources Control Board (SWRCB), Army Corps of Engineers Clean Water Act Section 404 permit, and SWRCB Clean Water Act 401 Certification. These permits are expected in the fall of 2026. The project also needs to execute public benefit contracts. Drafts CAPBs will be released for public comment in June 2026. Final executed contracts are expected by December 2026. Lastly, the Sites Project will need to execute contracts (Benefits and Obligation Agreements) with project participants and the Bureau of Reclamation (Partnership Agreement). Those agreements are expected to be completed by December 1, 2026.

The Sites Project would need to meet the statutory requirements described in Water Code section 79750(b) before receiving a final funding award. Any supplemental funding determination is conditional and the amount at final funding may change depending on final water right conditions and the final amounts in the CAPBs.

Consistency with Regulations

WSIP regulation section 6020(e) provides that the Commission shall not make a supplemental funding determination if the applicable administering agency does not agree to include the additional public benefits in the contract for public benefits or if uncommitted funds are unavailable. The Commission currently has \$587,443,747 in uncommitted funds. And, DWR has integrated the new emergency response public benefit into its draft CAPB.

In considering the ability of the collective suite of projects to advance the WSIP goals and purposes, providing the Sites Project with a supplemental funding determination will help the Project secure additional funding, thus assisting the project in meeting its requirements to begin construction while leaving funds available to the remaining projects in the WSIP that have yet to request supplemental funding.

Public Benefit Value Summary

A summary of the public benefit values updated using information from CDFW and DWR’s draft CAPBs, the RCCI as of April 2026, and updated water values is provided in Table 5 below. The public benefits are based on information provided in the draft water right decision. These values could change once the final water rights decision is made and CAPBs are finalized. The Commission will reconsider the physical benefits and the associated monetary values at the time of the final funding hearing.

Table 5. Sites Reservoir Public Benefits in January 2026 Dollars

Public Benefit Type	Term of Contract	Expected Year of First Benefit	Present Value of Public Benefit
Ecosystem	70 years	2038	\$806,443,952
Flood Damage Reduction	75 years	2034	\$66,518,546
Emergency Response	35 years	2035	\$199,280,579
Recreation	75 years	2034	\$291,034,473
Total Public Benefits			\$1,363,227,550

Staff Recommendation

Staff recommends that the Commission make a supplemental funding determination for the Sites Project in the amount of \$268,904,043, which reflects the new emergency response benefit and inflationary increases to the other public benefits. Using the calculated values based on the draft CAPBs the total recommended conditional amount for the Sites Project is shown in Table 6 below.

Table 6: Recommended Inflationary Increase

Current MCED Amount	Recommended Supplemental Amount	Resulting Conditional Amount
\$1,094,373,507	\$268,904,043	\$1,363,277,550

The WSIP regulation section 6020(g)(1) directs the Commission to consider other projects in the WSIP during supplemental funding determination requests. It further states that the Commission should not approve such a request if it determines that reserving uncommitted funds for other projects supports WSIP goals and outweighs the need for supplemental funding, or that the supplemental funding will not support the timely completion of the existing approved project. If approved, \$318.5M of uncommitted funding would remain available for other supplemental funding determinations for existing WSIP projects (as shown in Table 7). It is staff’s opinion that this remaining uncommitted amount will be sufficient to provide remaining projects with supplemental funding determinations if

those remaining projects are able to provide the Commission assurances of project progress.

Table 7: WSIP Uncommitted Funds

Available Uncommitted Funds	Recommended Supplemental Funding Amount	Remaining Uncommitted Funds
\$587,443,747	\$268,904,043	\$318,539,704