

## **ZONE 7 BOARD OF DIRECTORS WATER RESOURCES COMMITTEE**

DATE: Tuesday, December 7, 2021  
TIME: 11:00 a.m.  
LOCATION: Boardroom  
Zone 7 Administration Building  
100 North Canyons Parkway  
Livermore, Ca 94551

Director Figuers  
Director Gambs  
Director Palmer

### **AGENDA**

1. Public Comment on Items Not on Agenda
2. Third Amendment to 2019 Sites Reservoir Project Agreement
3. Routine Maintenance Program – Programmatic Permits Update
4. Verbal Reports
5. Adjournment



100 North Canyons Parkway  
Livermore, CA 94551  
(925) 454-5000

**ORIGINATING SECTION:** Integrated Planning  
**CONTACT:** Lillian Xie/Amparo Flores

**AGENDA DATE:** December 7, 2021

**SUBJECT:** Third Amendment to 2019 Sites Reservoir Project Agreement

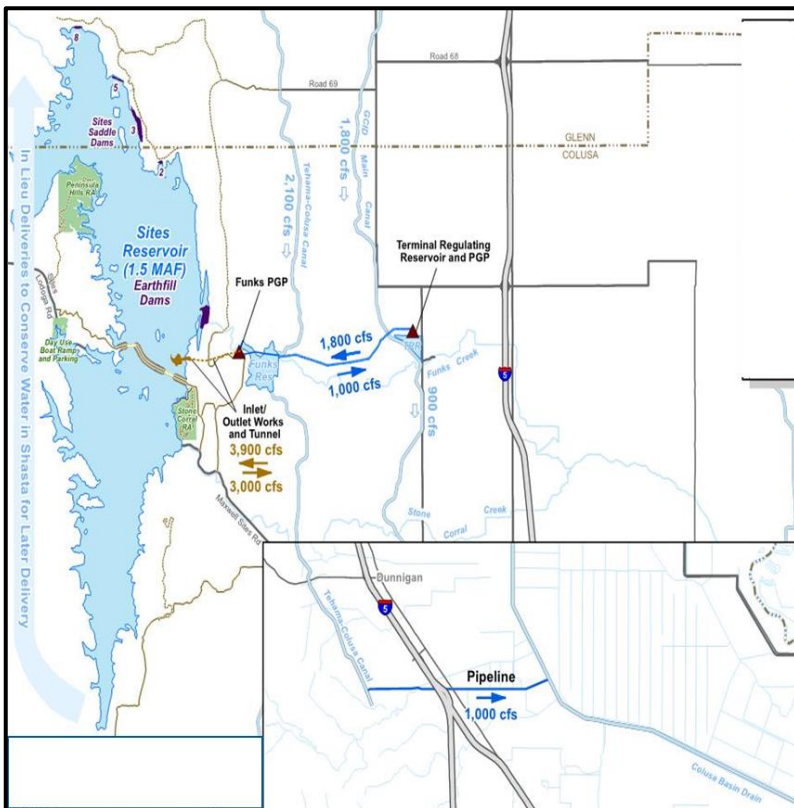
**SUMMARY:**

- In order to support the Mission Statement to deliver safe, reliable, efficient, and sustainable water, the Zone 7 Water Agency (Zone 7) has been considering the Sites Reservoir Project (Project), which would construct a new off-stream reservoir located 75 miles northwest of Sacramento. Sites Reservoir could provide both storage and supply to Zone 7, which is in support of Strategic Plan Initiative No. 1 – Establish a diversified water supply plan.
- In December 2016, the Board authorized participation in Phase 1 at a cost of \$850,000. In December 2019, the Board authorized participation in Phase 2 (2019 Sites Reservoir Project Agreement) at \$600,000. In July 2020, the Board authorized a Second Amendment to Phase 2 at \$1 million. To-date, work funded under these two phases has included preliminary planning and design work, at a total Zone 7 actual cost of about \$2.4 million.
- At this time, continued participation in the Project from January 1, 2022 through December 31, 2024 will require a contract amendment (Third Amendment), including additional contribution of up to \$4 million from Zone 7 for continued participation level of 10,000 acre-feet per year. The amended Phase 2 will include work on securing federal funding, executing contracts with Project participants, obtaining permits and water rights, and developing the engineering design.
- The capital cost of Sites Reservoir is currently estimated at \$3.9 billion (2021 \$) based on the Project's preferred alternative of a 1.5 MAF reservoir. The capital cost to Zone 7 is estimated at \$176 million (2021 \$) with the unit cost currently estimated at \$1,100-1,300/AF (2021 \$) at Banks Pumping Plant. These costs will continue to be refined.
- The Third Amendment would continue Zone 7's participation in the Project through December 31, 2024. There are no off-ramps within the Third Amendment unless financing is secured before the end of 2024. Project financing would then result in an amended agreement, with the option for participants to discontinue/amend participation in the Project.
- Staff will give a presentation providing an overview of the Project, Zone's participation to-date, the terms of the Third Amendment, and the Project's costs and benefits to the Tri-Valley.

## Project Overview

It is widely recognized that California needs additional storage as climate change brings higher temperatures, smaller snowpack, and shorter and more intense storms. Currently sized at 1.5 million acre-feet (MAF), Sites Reservoir is intended to capture excess stormwater flows from the Sacramento River, after all other water rights and regulatory requirements are met. The reservoir is largely expected to be filled during wet years, although it is possible to fill the reservoir during dry years too. Captured water can be released when needed by Project participants. Because Sites Reservoir is not reliant on snowpack and is intended to fill during major storm events, its benefits improve under the more frequent extreme events forecasted under climate change.

The Project will utilize the existing Glenn-Colusa Irrigation District and Tehama-Colusa Canal Authority canals to convey water to Sites Reservoir from the Sacramento River and will deliver water back to the Sacramento River through the Tehama-Colusa Canal. The Project will utilize the existing Colusa Basin Drain for participant deliveries and for releases to the environment. The figure below is a site map showing major Project facilities. Located downstream of the Central Valley Project's (CVP's) Shasta Reservoir and upstream of where releases from the State Water Project's (SWP's) Oroville Reservoir flows into the Sacramento River, Sites Reservoir is planned to be cooperatively managed in conjunction with those reservoirs, thereby adding flexibility, reliability, and resiliency to statewide water supplies.



Unlike traditional reservoir projects, Sites Reservoir will be an off-stream facility that does not dam a major river system and will not block fish migration or spawning. In addition to providing water supply for municipal and agricultural use, Sites Reservoir will serve environmental uses such as improving conditions for Delta smelt; preserving cold-water pools in Shasta Reservoir to support salmon development, spawning, and rearing; and improving habitat for migratory birds and other native species. The California Water Commission (CWC) acknowledged the public environmental benefits of Sites Reservoir, awarding the Project \$836 million in State investment under Proposition 1's Water Storage Investment Program (WSIP).

Sites Reservoir has also received Federal investment, including over \$10 million in Water Infrastructure Improvements for the Nation (WIIN) Act funding and a \$449 million loan from the US Department of Agriculture's Rural Development program. The Project is recognized for its significant environmental and water supply benefits and is one of only two statewide projects specifically named as a priority project in Governor Newsom's Water Resilience Portfolio. Current Project participants include agricultural and municipal water districts in the Sacramento Valley, the Bay Area, San Joaquin Valley, and Southern California.

Currently, the expected long-term total average yield for the Project's preferred alternative is 234,000 AF. For water agencies (not including Bureau of Reclamation and the State of California), the total long-term average yield could be up to 167,000 AFY. Zone 7 has opted for 10,000 AFY of average yield from the Project (based on reservoir releases) and constituted 6% of water agency participation in the Project. The average yield of 10,000 AFY translates to 62,343 AF of storage allocation. Note that the storage allocation is an estimate and will be later finalized when federal and state participation is finalized. For Zone 7, Sites Reservoir could be a source of annual supplies to supplement State Water Project (SWP) water.

#### Project Costs: Capital and Long-Term Annual Costs

The capital cost of Sites Reservoir is currently estimated at \$3.9 billion (2021 \$) based on the Project's preferred alternative of a 1.5 MAF reservoir. The capital cost to Zone 7 is estimated at \$176 million (2021\$). Zone 7's estimated annual costs (2021 \$, including debt service and operating costs) range from \$7,500,000 to \$9,200,000 once the project is operational. Assuming a net yield of about 7,200 AF after accounting for Delta carriage losses, the unit cost is approximately \$1,100-1,300/AF in 2021 \$ at Banks Pumping Plant. Note that these costs will continue to be refined as the detailed engineering proceeds and permit terms are defined further.

#### 2019 Reservoir Project Agreement: Project Milestones (April 2019 to December 2021)

Zone 7 executed the 2019 Sites Reservoir Project Agreement and the First Amendment at a cost of \$60/AF and participation level of 10,000 AFY (total of \$600,000). Following that, Zone 7 executed the Second Amendment at a cost of \$100/AF and participation level of 10,000 AFY (total of \$1 million). Key milestones being achieved under the current agreement include preparation of a revised Draft Environmental Impact Report/Statement (released for public review on November 12, 2021 with comments due on January 11, 2022); advancement of key permit applications; completion of preliminary hydraulics model and analysis; submission of a letter of interest for a WIFIA loan of up to \$600 million; refinement of yield and cost estimates; and design support for the environmental permitting process.

#### Third Amendment (January 2022 to December 2024)

- Scope of Work

Under the Third Amendment to the 2019 Reservoir Project Agreement, the scope of work will focus on securing funding, permits, and water rights and advancing engineering design over January 2022 through December 2024.

Key finance tasks include securing a final funding agreement for a portion of the WSIP funding; executing final operations agreements with facility partners and federal and state agencies; securing federal funding from WIIN Act and other sources; completing loan applications and preparing to initiate bank financing; and executing Benefits and Obligations Contracts with local agency participants.

Key permitting tasks include completing the Final Environmental Impact Report/Statement; obtaining all key environmental permits for WSIP final award; receiving water right Order and Permit; obtaining local agency agreements and permits; executing benefit contracts with DWR and California Department of Fish and Wildlife; developing a mitigation acquisition master plan; beginning biological and cultural resources surveys; and initiating permit applications for all dam construction.

Key engineering tasks include completing 30% level design and cost estimates; completing further facility designs as required for WSIP funding; finalizing construction bid packages; determining overall Project schedule; developing land acquisition master plan and rights of way manual; and performing geotechnical evaluations of “willing seller” properties.

- Planning Costs (2016-2024) and Zone 7 Funding

Zone 7 has invested about \$2,450,000 over 2016-2021. Execution of the Third Amendment would commit Zone 7 to funding up to an additional \$400/AF to cover the above scope of work, with cash calls as shown in the table below. At the current level of 10,000 AFY, Zone 7’s additional cost under execution of the Third Amendment would be up to \$4,000,000 (\$400/AF x 10,000 AF) over Fiscal Year 2021-2022 (FY 2021/22) through FY 2023/24 as follows:

<b>Fiscal Year</b>	<b>Cash Call Maximum Amount &amp; Date</b>	<b>Maximum Amount (@ 10,000 AFY)</b>	<b>Funding Source</b>
2021/22	\$100/AF (April 1, 2022)	\$1,000,000	Fund 300
2022/23	\$140/AF (January 1, 2023)	\$1,400,000	Fund 300
2023/24	\$160/AF (January 1, 2024)	\$1,600,000	Fund 300 / Remaining funds to be budgeted in Fund 130
<b>TOTAL</b>		<b>\$4,000,000</b>	

Staff recommends the following funding for Third Amendment costs: funding through FY 2022/23 to be fully funded from Fund 300 (Water Facilities Fund) and funding for

FY 2023/24 to be shared between Fund 300 (Water Facilities Fund) and Fund 130 (Water Enterprise Capital Expansion Fund).

Cash call check-ins and budget adjustments will occur annually. The intent of cash call check-ins is to recalibrate goals and objectives, key deliverable progress, expense and revenue assumptions, subject area budgets, cash flow projections, and cash call amounts. Cash call check-in periods will occur approximately in October of 2022 and 2023 to define the Project needs for the following calendar year and the appropriate cash call amounts up to the limits shown in the table above.

- Terms of Commitment

Approval of the Third Amendment represents a commitment to the following:

- confirmation of participation level, which staff recommends to remain at 10,000 AF;
- payment of the first cash call invoice of \$100/AF in April 2022 and up to a total of \$300/AF for the remaining cash calls;
- approval of the Amendment 3 Work Plan; and
- affirmation of Primary (Amparo Flores) and Alternate (Valerie Pryor) representative designations to the Reservoir Committee, which consists of staff from participating agencies.

The Third Amendment would continue Zone 7's participation in the Project through December 31, 2024. There are no off-ramps within the Third Amendment unless financing is secured. The Project may secure financing as early as mid-2023, which would necessitate an amended agreement to include financing terms; under this condition, the amended agreement would provide a final off-ramp to participants who do not wish to proceed with the Project.

#### Project Benefits to the Tri-Valley

The 2019 WSE Update confirmed the need for new water supplies to maintain the reliability of Zone 7's system in serving the Tri-Valley. In that report, staff considered 5,000 to 10,000 AFY of average yield from Sites Reservoir, in combination with other water supply options. The availability of this supply was varied based on hydrology, with more water delivered to Zone 7 during dry years. At Zone 7's request, water would be released from Sites Reservoir annually to the Sacramento River, then conveyed by the SWP system through the Delta and to the South Bay Aqueduct.

Based on the water supply risk model results, Sites Reservoir's key benefit is the availability of water during dry years when the shortage risk is greatest. Sites Reservoir is a good complement to the Delta Conveyance Project, which produces the highest yield during wet years. Because Sites Reservoir provides both storage and new supply, it adds flexibility to Zone 7's water supply system; for example, the timing of deliveries from Sites Reservoir could be modified to maximize yields from other water supplies and/or to accommodate delivery timing restrictions of other supplies.

## Recommendation

Based on the benefits described above and the Project's progress, staff recommends execution of the Third Amendment and continued participation in Sites Reservoir at 10,000 AFY. This amount could supplement SWP supplies to meet Zone 7's long-term reliability policy goals. A reduced level of participation (e.g., 5,000 AFY) could also be combined with other long-term water supply sources (e.g., potable reuse) to meet those goals; however, the higher level of participation at this phase of the Project would offer Zone 7 more flexibility given the uncertainties of various water supply options.

### **FUNDING:**

Execution of the Third Amendment would commit Zone 7 to funding up to an additional \$400/AF; at the current level of 10,000 AFY, Zone 7's total additional cost would be up to \$4,000,000 (\$400/AF x 10,000 AF) over FY 2021/22 to FY 2023/24. These costs will be fully funded from Fund 300 (Water Facilities Fund) through FY 2022/23. Funding for FY 2023/24 will be shared between Fund 300 (Water Facilities Fund) and Fund 130 (Water Enterprise Capital Expansion Fund). Funding for the Second Amendment effective through December 31, 2021 was previously approved by the Board under Fund 310 (Water Supply and Reliability Fund).

### **RECOMMENDED ACTION:**

Provide direction to staff.



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**ORIGINATING SECTION:** Integrated Planning

**CONTACT:** Elke Rank/Amparo Flores

**AGENDA DATE:** December 7, 2021

**SUBJECT:** Routine Maintenance Program – Programmatic Permits Update

**SUMMARY:**

- To meet Zone 7 Water Agency’s (“Agency” or “Zone 7”) mission to “Deliver safe, reliable, efficient, and sustainable water and flood protection services”, Zone 7 continues to comply with environmental regulations and plan for environmental services needs for the water supply and flood protection systems; this is aligned with multiple Strategic Initiatives including Initiative #9 – Continue to maintain the Flood Protection System and #10 – Update the flood protection strategy. Specifically, Initiative #10 includes a measure to complete the regulatory process to acquire a long-term, routine stream maintenance permits (aka Routine Maintenance Program or RMP).
- Zone 7 conducts routine channel or stream maintenance activities, including bank and structure repairs, road maintenance, erosion control, and vegetation management. Many of these activities require regulatory approvals by the California Department of Fish and Wildlife, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers.
- Over roughly the last ten years, it has become increasingly difficult to secure in a timely manner environmental permits from these agencies. A programmatic routine maintenance permit is the preferred approach among regulatory agencies to provide flexibility, unified regulatory coverage among agencies, and improved ability for permittees to complete work in a timely manner. Many local flood districts have or are developing such permits.
- On November 16, 2016, the Zone 7 Board adopted a resolution directing staff to initiate a contract with Horizon Water and Environment (Horizon) to begin the process of developing programmatic permits for routine channel maintenance (Resolution #16-181).
- Phase 1 of this work—focused on the development of a Routine Maintenance Program Manual to support the permit application as well as other foundational documents—is nearly complete. A presentation to the Water Resources Committee will be given, including an overview of the environmental regulatory and permitting processes and the routine stream maintenance activities to be covered by the permit.
- Staff anticipates requesting authorization in the coming months for Horizon to complete Phase 2 of this effort, which will focus on the permit applications and negotiations.

**FUNDING:**

No funding is required at this time.

**RECOMMENDED ACTION:**

Informational only