



TITLE

Sites Reservoir Project

RECOMMENDATION

Receive financing information on the Sites Reservoir Project

CONTACT

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BACKGROUND & ANALYSIS

The Sites Reservoir Project (formerly the North of Delta "Off Stream" Project) has been studied by both the California Department of Water Resources (DWR) and the Federal Bureau of Reclamation (Bureau) since the 1970's, although neither agency pursued it beyond the conceptual stage. In 2010, a consortium of local agencies renewed interest in the Project. The group formed the Sites Reservoir Joint Powers Authority (Sites JPA) and it is now the lead agency pursuing the Project.

The project will result in a new surface water storage reservoir located 70 miles northwest of Sacramento, CA (near the town of Maxwell). It's worth noting the term "Off Stream" in the Project's former name, which identifies that it will be located off of a stream. This means the Project will not dam the Sacramento River (or any of its tributaries). The Project stands in contrast to many existing reservoirs which were built by damming naturally flowing rivers without a full understanding of the long-term consequences to the environment. It is unique in this regard because it will provide dramatic benefits to the ecosystem while simultaneously providing a new source of water for American Canyon.

The project is contemplated to impound up to 1,500,000 acre-feet (AF) of water behind a new dam located 15 miles west of the Sacramento River. By way of reference, the new reservoir will be slightly smaller than Lake Berryessa. The water will be transported to the reservoir via existing irrigation canals and new pipelines. Water will be diverted from the River at existing diversion points during winter months when flows are high. Based on historical records, the reservoir would be able to be filled even during drought years because it will take advantage of the peak flows that still occur each season. The project is also envisioned to have hydroelectric capabilities and will create new recreational areas.

While water will be diverted into the reservoir during high winter flows, it will be released from the reservoir for use throughout the remainder of the year. The water would be returned to the Sacramento River where it will eventually find its way to the Northbay Aqueduct (NBA) and then it will be pumped to the City's Water Treatment Plant. Although the details are still to be worked out, Sites Water is likely to be considered "non-Project" water by DWR (although this is still under discussion) and will be transmitted through the NBA in the same manner as other "non-Project" water such as "Vallejo Permit Water".

Based on modeling scenarios, it is anticipated that an annual average of 300,000 AF of water would be diverted for storage in Sites Reservoir. Water released from the reservoir will be used for both municipal and agricultural purposes (by water purveyors such as the City) and for environmental uses in the Sacramento River/San Joaquin River Delta (by DWR and others). The environmental uses primarily pertain to increasing the amount of cold water storage available at Lake Oroville. In effect, DWR will store water for the State Water Project (SWP) in the Sites Reservoir instead of Lake Oroville. The result will be increased availability of cold water for release into the Sacramento River at strategic times beneficial to special status species such as winter-run Chinook salmon. DWR will also release water from Lake Oroville at other strategic times to help maintain Delta water quality and environmental standards. It is these environmental benefits that help make the Project competitive for Proposition 1 funding.

The Sites Project is designed to take advantage of high flows that occur each year. The City's current participation level in the project is 4,000 AF, which is the average annual yield or delivery of water. Based on modeling, 4,000 AF is available in 68% of the years. This level of participation provides the City with 24,936 AF of allocated storage in the reservoir. This allows the City to manage water releases from storage based on need and storage levels similar to having a local reservoir.

It is important to consider Sites Water will still be conveyed through the NBA and the City's use of this pipeline is constrained by limitations on pipeline capacity and seasonal environmental restrictions at the Barker Slough Pumping Plant. The NBA pipeline constraints consist of the pipeline being too small for future demand and an organic biofilm that has developed that constricts the flow capacity. There are also pumping restrictions at specific times of the year which limit the delivery of water due to endangered species concerns. The investigation of the Alternate Intake Project (AIP) is an effort to reduce or eliminate these constraints. Also, the unit cost for Sites Reservoir does not include any costs for any future upgrades or improvements to the NBA, such as the AIP.

Construction costs for the project are estimated at \$7.5B in 2024 dollars. Estimated State and Federal upfront contribution of \$2.5B leaves \$5.0B to be financed by Sites participants. Given that the project will be constructed over a 7-to-8-year period, inflation is expected to make the actual financed amount be \$6.9B. The City's share of this total cost is \$177M. The City's estimated annual cost would be \$13M to cover construction financing and O&M. These payments would start in FY2033 due to capitalized interest through the construction period. The Water Fund will need to increase revenue to take on these new costs. Revenue can be derived from a variety of sources

including water sales to current and new customers, sales of excess NBA water, sales of Sites water once it is available, and capacity fees. Managing the expense budget and contributions towards annual CIP also frees up revenue that can be applied to the new expense.

Project Governance

The Project is governed by the Sites JPA and its select group of members are all within the Sacramento Valley. The City is a member of the broader "Reservoir Committee," which is made up of all of those agencies that anticipate taking water. There are also representatives from DWR and USBR on the Reservoir Committee. A reasonable comparison is the JPA members are the "Board." and consist of elected officials of those local agencies while the Reservoir Committee is like a Technical Advisory Committee made up of General Managers, PW Directors, etc.

Next Steps

2026 promises to be a momentous year for the Sites Project with many important decisions and milestones expected. If all goes as planned, groundbreaking by the end of the year could occur. The staff presentation tonight will provide additional information and next steps.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Infrastructure: "Develop and maintain infrastructure resources to support sustainable growth."

FISCAL IMPACT

Tonight's item is informational only. No Council action is requested, and there is no financial impact.

ENVIRONMENTAL REVIEW

The Sites Reservoir Project CEQA determination was finalized on November 17, 2023, when the Sites Project Authority certified the Final Environmental Impact Report (EIR) and filed its Notice of Determination under State Clearinghouse number 2001112009.

COMMUNICATION

Level 3: Broad Communication

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Staff will continue to share information about the Sites Project in the next three months as important milestones unfold.

ATTACHMENTS:

[1. Sites Council Presentation](#)