



Meeting: **Joint Reservoir Committee & Authority Board** **February 17, 2023**
Agenda Item 3.2

Subject: **Project Schedule through Completion of Construction**

Requested Action:

Review and comment on development of the overall project schedule through completion of construction.

Detailed Description/Background:

Advancing the Sites Reservoir Project beyond the planning phase and into final design and construction (Phase 3/4) will require a better understanding of the timing and sequencing of activities through the completion of construction. To date, there has not been a detailed review of the construction sequencing and scheduling involving Phase 3 and 4 of the project (ie final design and construction). This is to be done as part of the Amendment 3 work plan and Staff has initiated the development of a program baseline schedule (Program Schedule). The Program Schedule will integrate the adopted Contracting Strategy (Jul 2022). Staff requests feedback from Board members on the conditions and actions being contemplated and any other suggestions that could meaningfully assist the project team in meeting the goal of a six-year construction period.

Establishing a Program Schedule is strategically important as it allows the Authority to:

- **Manage Cost:** Identify opportunities to expedite the Project and avoid the cost of delay (escalation of project construction costs could be around \$80M-\$100M per year of delay, which affects affordability).
- **Manage Risk:** Anticipate resource needs and challenges and focus efforts on the critical path, key to proactive risk management.
- **Achieve Expeditious Permitting Decisions:** Communicate clearly to external stakeholders, including regulatory agencies and policy-makers, the criticality of their activities to the overall project schedule.
- **Maintain Credibility:** Communicate to funding partners, contractors, community, and beneficiaries a common timeline and clear expectations.

Staff and consultants from all disciplines have provided input into a detailed critical path schedule that will form the basis of a recommended Program Schedule, which is anticipated to be adopted in April 2023. Initial efforts have focused on defining all activities required to complete the Golden Gate Dam, the anticipated critical path project feature. The Golden Gate Dam has extensive geotechnical exploration requirements and a regulatory approval process with

the Division of Safety of Dams (DSOD). This project feature also requires significant access improvements before a ramp up in dam construction activities can begin.

The preliminary result of this scheduling exercise to date shows an “un-optimized” and mostly serial activity based eight year construction period. Staff feels there is room for improvement and with feedback from the Operations and Engineering Workgroup, has established a goal among the project team of developing “optimal” conditions and actions that would result in a schedule that initiates operations by the end of 2031, which assumes a groundbreaking in 2025 (i.e. a six-year construction period). To meet this goal, staff has initially identified the following conditions and actions, which will be further evaluated along with possibly other items that will be considered and brought to the Board as part of developing the recommended Program Schedule:

1. Develop an Early Land Acquisition Program (requires policy input, currently with the Operations and Engineering Workgroup and the Land Management Committee with a recommendation expected in April 2023).
2. Procure the CMAR sooner, before end of Amendment 3.
3. Secure with DSOD the resources needed for phased approvals.
4. Increase design resources (which have limited utility depending on acquiring geotechnical data and land).
5. Secure in terrestrial habitat permits mitigation strategies that allow for coordinating/phasing avoidance/mitigation measures to support efficient and continuous construction.
6. Advance design of dam precedent activities faster (e.g., roads and bridges).
7. Streamline design submittals and issue construction packages on less advanced designs and performance specifications.

Staff will continue to work through the Operations and Engineering Workgroup and the Land Management Committee to develop a Program Schedule for adoption, which is anticipated to occur in April 2023.

Prior Action: July 27, 2022: Approved the Contracting Strategy for the purpose of developing an overall project construction schedule.

Fiscal Impact/Funding Source: The Amendment 3 Work Plan includes sufficient budget to cover required resources and activities to develop the program baseline schedule.

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Primary Service Provider: Brown and Caldwell

Attachments: None.