



Topic: **Joint Reservoir Committee/Authority Board
Agenda Item 2.1**

2021 June 23

Subject: **Updated Feasibility Total Project Cost Estimate**

Requested Action:

Consider acceptance of the Project Feasibility Cost Estimate.

Detailed Description/Background:

In 2019 and early 2020, the Sites Project Authority and its participants conducted a comprehensive Value Planning process to review the project’s facilities and operations in an effort to create a more affordable, buildable and permittable project. Appraisal level cost estimates were provided as part of this effort and were expected to change as the feasibility analysis progressed. Over the past 12 months the Sites Project Team has continued to refine the project’s design, collecting more data, and conducting additional analysis and engineering to inform preparation of the current and updated Feasibility Cost Estimate. On June 15, 2021, staff reviewed the updated Feasibility Cost Estimate with the Reservoir Operations and Engineering Workgroup. The Workgroup recommended the estimate to be accepted by the Reservoir Project Committee and Site Project Authority.

Staff recommends acceptance of the Feasibility Cost Estimate, to be used in preparation of the WSIP Feasibility Report, in order to meet the California Water Commission Prop 1 WSIP requirement by January 1, 2022.

This updated feasibility-level cost estimate is for the “right sized” project and provides investors with a higher degree of certainty in project affordability. The cost estimate is prepared based on guidance established by the Association for Advancement of Cost Engineering (AACE) and is a bottom-up approach, categorized as a Class 4 cost estimate, that utilizes 10-percent level of design details, analysis of material needs, and an estimated construction schedule to provide a higher level of cost estimate accuracy compared to the estimates prepared during the Value Planning process. The Feasibility Cost Estimate for each of the two reservoir sizes are:

- Alternative 1, a 1.5 million acre-feet reservoir, estimated at approximately **\$3.93 billion** in current year cost (2021 dollars).
- Alternative 2, a 1.3 million acre-feet reservoir, estimated at approximately **\$3.87 billion** (2021 dollars).

This more detailed and thorough analysis in preparing the Feasibility Cost Estimate revealed roughly a 30% cost increase from prior estimates that were developed during the Value Planning process (approximately \$3 billion in 2019 dollars). Significant drivers for cost increases include escalation from 2019 to 2021 dollars, current market pricing for materials, equipment and labor, new engineering data and analysis that resulted in design refinements, and a bottom-up estimate approach which provided a better understanding of construction material quantities and handling needs. This increase is within the expected accuracy range of the AACE Class 5 cost estimates prepared as part of the Value Planning process. The Feasibility Cost Estimate is a result of several months of input from the Reservoir Operations and Engineering Workgroup, the Land Management Committee, and the Value Planning Workgroup. Several value engineering options were suggested and evaluated through this process, and those that were determined to be feasible have been included in this estimate. It has been peer reviewed and confirmed by experts in the dam and heavy civil works construction field.

Similar to the cost estimates prepared during the Value Planning process, the Feasibility Cost Estimate is not a final estimate. As the team continues to collect additional technical data, evaluate potential cost saving opportunities, and refine project analysis and design, the cost estimate accuracy will continue to improve. The Sites Project team will remain focused on controlling project costs and continue to be transparent with the information needed to support decision making.

Cost increases can affect project affordability; however, this updated cost is not the only change being considered. The Affordability Workshop being conducted on July 23, 2021 will be where all the factors are brought together for a complete affordability analysis. Even with the increased cost estimate, the reasons to invest in the Sites Reservoir are many and compared to costs of other water supply options, the cost of Sites water is extremely competitive for the increased water supplies and added reliability delivered in a changing climate.

Prior Action: None.

Fiscal Impact/Funding Source:

None. The cost estimates will inform project funding and financing analysis, which along with other considerations will factor into evaluation of project affordability.

Staff Contact: Henry Luu

Attachments: None.