Meeting: **Reservoir Committee & Authority Board** **May 22, 2026**
Agenda Item 3.1

Subject: **Lower Colusa Basin Drain (CBD) System Costs Updates for Project Baseline Report**

Requested Action:

Receive Lower Colusa Basin Drain System project cost updates for the Project Baseline Report.

Detailed Description/Background:

The Sites Reservoir Project (Project) plans to utilize existing conveyance systems as part of the operations of the Project, including the lower portion of the CBD and associated facilities ("Lower CBD System"). As development of the Project Baseline Report advances, staff has reviewed whether current cost assumptions adequately reflect potential risks and operational considerations- associated with using the Lower CBD to convey Sites water to the Sacramento River for South of Delta deliveries.

Current Lower CBD Costs:

The June 2025 project cost estimate reviewed by the Board does not specifically include capital costs for improvements in the Lower CBD system beyond the Dunnigan pipeline outfall structure. However, there are 2025 cost estimate elements that could be considered available for Lower CBD improvements, including (1) a portion of the non-contract costs could be used for additional modeling analysis and flow monitoring, and (2) a risk-based design contingency determined based on the 2025 estimated cost to extend the Dunnigan pipeline to the Sacramento River.

Lower CBD System Costs Updates:

The need to develop an itemized cost estimate for CBD improvements rather than using contingency was identified as a Conditions Precedent prior to entering the investor commitment period following the October 2025 participant tour.

Through modeling advancements, coordination with the Lower CBD stakeholders, and analysis since the participant tour, the following costs are recommended to be added to the upcoming 2026 project cost estimate to be included in the Baseline Report:

1. **Lower CBD system O&M (add)**: This additional cost item covers the Authority's costs for Site's portion of Lower CBD system maintenance and Site's contract operations.
2. **Flowage Agreements (add)**: Includes costs for development and execution of flowage agreements with Landowners to gain rights for conveying water through the Lower CBD system.
3. **Risk Based Contingency for Extending the Dunnigan Pipeline to the Sacramento River (update)**: Includes the cost updates that will be provided in the Conveyance Capacity TM for extending Dunnigan Pipeline to the River.

Based on recent hydraulic modeling updates and input from the Lower CBD working group, the berm improvements that were envisioned at the time of the October 2025 tour are no longer recommended. Berm improvements would expose the Authority to real and perceived flood risk liability and would have agricultural and conservation easement land impacts that may not be acceptable to entities and individual landowners along the Lower CBD.

Lower CBD solutions have shifted to operational solutions (i.e., operating to maximum water surface elevations, maximum Lower CBD flow rates). Additional flow monitoring, cross-sectional data, and landowner coordination will be key next steps toward Lower CBD model accuracy, which will be used to set operational boundaries and lay the groundwork for operations in the Lower CBD system.

<u>Other Lower CBD System Costs to Consider:</u>

Two additional items in the Lower CBD system to consider that may impact project performance are (1) Lower CBD System Losses, and (2) Lower CBD System Missed Release Opportunity Costs.

<u>Lower CBD System Losses</u>

Lower CBD system losses could be caused by evapotranspiration, seepage, out of channel flow loss, start-up filling of the Lower CBD, and potential unauthorized diversion of Sites Water. Additional details on the factors contributing to potential losses and the valuation of these losses will be addressed in the Baseline Report after being discussed with the O&E Committee.

<u>Lower CBD Missed Release Opportunity Costs</u>

In addition to the losses, the opportunity cost of not being able to convey Site's water when the ambient Lower CBD flows are too high also should be acknowledged. Based on the available Lower CBD stage level data at the discharge to the Sacramento River, high flows in the Lower CBD are more rare than low flows during the transfer window. How the Lower CBD system hydraulic limitations will impact project performance requires additional flow monitoring, hydraulic modeling, analysis, and coordination with the operational model. This more extensive analysis can be accomplished immediately following the start of Phase 3.

Costs for Extending the Dunnigan Pipeline to the Sacramento River

An alternative examined in the Final EIR/EIS but not selected within the approved project is delivery of project releases to the Sacramento River by extending the Dunnigan pipeline directly to the river. Construction costs to extend the pipeline to the Sacramento River will be addressed in the Baseline Report after being discussed with the O&E Committee. It is also of note that upon initiating preliminary design for extending the pipeline to the river, it will take 6-7 years for design, CEQA/NEPA, permitting, geotechnical investigations, land acquisition and construction to be completed prior to the extended pipeline being in operation.

In conclusion, to address Lower CBD system unknowns staff is seeking Board feedback on the following concept approach:

1. Update Lower CBD costs in the Baseline report to include O&M, flowage agreements, and updating the risk-based contingency for extending the Dunnigan pipeline to the Sacramento River. This is estimated to add approximately $100,000,000 to the management budget for the downstream facilities.

2. Upon initiation of Phase 3, proceed with board approved studies and evaluations necessary to proceed with a dual strategy of i) continuing work on the use of the Lower CBD system and ii) proceed with further conceptual analysis of an extension of the Dunnigan Pipeline to the Sacramento River as more is learned about use of the Lower CBD system.

<u>Prior Action</u>:

<u>March 2026</u>: Receive an update on Lower Colusa Basin Drain System conditions precedent to Investor Commitment.

<u>Fiscal Impact/Funding Source</u>:

There are sufficient funds in the Amendment 3 work plan to pay the costs related to this effort in 2026. Initiation of schedule critical activities for the Pipeline to River will be covered in Phase 3/4/5 (i.e., 2027 and beyond).

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