

STAFF REPORT

Meeting Type: Planning Committee/Board of Directors

Title: Kastania Pump Station Phase 2 Rehabilitation Project Update

From: Alex Anaya, Director of Engineering

Through: Ben Horenstein, General Manager

Meeting Date: April 22, 2025

TYPE OF ITEM: Approve X Review and Comment

RECOMMENDATION: Review and comment on the update for the Kastania Pump Station Phase 2

Rehabilitation Project

SUMMARY: Staff will provide an update on the Kastania Pump Station Phase 2 Rehabilitation Project and the recommended design modifications necessary in relation to the proposed water conveyance Atmospheric River Capture Project.

DISCUSSION: In August 2023, the District began the design of the second phase of the Kastania Pump Station Phase 2 Rehabilitation Project. The scope of this phase of the project included an extensive rehabilitation of the pump station including the installation of a new electrical motor control center, variable frequency drives, pumps, motors, roof, pump station site drainage improvements and the addition of a new pressure relief valve and tank. The objective of this project was to enhance transmission system reliability while increasing the maximum flow rate from the existing 17.5 million gallons per day (MGD) to 24 MGD.

Occurring simultaneously to the Kastania Pump Station Phase 2 design, the District was evaluating larger water storage and conveyance alternatives, and the Board selected the water conveyance Atmospheric River Capture Project as the preferred water supply alternative and directed staff to advance this project into design and environmental review. During the review of the Atmospheric River Capture Project, Staff identified an opportunity to modify the Kastania Pump Station Phase 2 design to avoid investing in a pump station that would not fully serve the proposed Atmospheric River Capture Project in the future. In light of the work that the District is undertaking on the proposed water conveyance project, it seems prudent to better understand future total flow rates that could inform different modifications at the Kastania Pump Station. Implementing scaled down improvements to the Kastania Pump Station Phase 2 Project would allow the District to operate the first phase of the proposed Atmospheric River Capture Project at the targeted flow rate of 24 MGD, without making investments in Kastania that could require reconstruction in the future. The future, fully utilized Atmospheric River Capture Project's anticipated flow rate is approximately 42 MGD, which

could be accommodated as needed in future years through additional design and improvements to the Kastania Pump Station. Staff is pivoting with the consultant team to pursue a scaled down Kastania Pump Station Phase 2 project that will be able to provide 24 MGD, which would be sufficient to serve the first phase of the proposed Atmospheric River Capture Project and will also provide improved function to the District's water delivery system in the near future without incurring costs related to improvements which may provide little utility in the future.

ENVIRONMENTAL REVIEW: Not applicable.

FISCAL IMPACT: None.

ATTACHMENT(S): None.