Westlands Water District

MEMORANDUM

TO: SLDMWA BOARD OF DIRECTORS

FROM: TOM BOARDMAN, WATER RESOURCES ENGINEER

SUBJECT MAY PROJECT OPERATIONS UPDATE

DATE: MAY 10, 2019

Project Operations

- Jones pumping has declined from 1,700 cfs down to its minimum of 800 cfs due to the salmon BiOp that requires that exports be limited to 25% of the San Joaquin flow during April and May (I/E ratio). Operators were hopeful that snow melt in the San Joaquin basin might result in increased of pumping during May, but due to cool weather, significant spills from rim reservoirs have not occurred. Jones is scheduled to increase to 2,000 cfs next week due to increased San Joaquin flows and because Banks will out of service during 3 days of scheduled maintenance.
- Banks has been pumping 1,200 cfs since early May as project operators balance the Export Sharing account. The latest SWP operations forecast shows that Banks pumping will remain less than 40% of its capacity until July.
- Projected median April-July inflow to San Joaquin river tributary reservoirs is about 48% above average. As such, inflows to rim reservoirs has doubled since mid April, but spills have been minimized as cool weather has allowed reservoir operators to manage inflow rates. However, storage in San Joaquin basin reservoirs is high enough that a sudden warming trend could result in increased flood releases and higher exports during the latter half of May.
- Reclamation's latest Millerton operation forecast shows no flood flows to the Mendota Pool under 90% exceedance conditions, but about 60 TAF into the Pool under the 50% exceedance forecast.
- Shasta storage is about 4.3 MAF and no longer has flood control storage constraints for the spring. Releases are at 8,000 cfs to manage the inflow rate and completely fill the reservoir later this month. Reclamation recently reported that Shasta has ample cold water this year to meet temperature objectives for salmon during the summer and fall months.
- Releases from Folsom are at 8,900 cfs as the reservoir is encroached into flood control space by about 40 TAF. Current storage is about 900 TAF and is expected to fill when the peak inflow rate occurs by late May or early June.
- With a Wet year-type classification for the Sacramento basin, project operators are now planning to comply with a fall X2 requirement as required by the delta smelt BiOp. As such, Reclamation's latest operation forecast shows CVP exports at 1-2 units during October and November. Reclamation has stated that it plans to meet its share of the X2

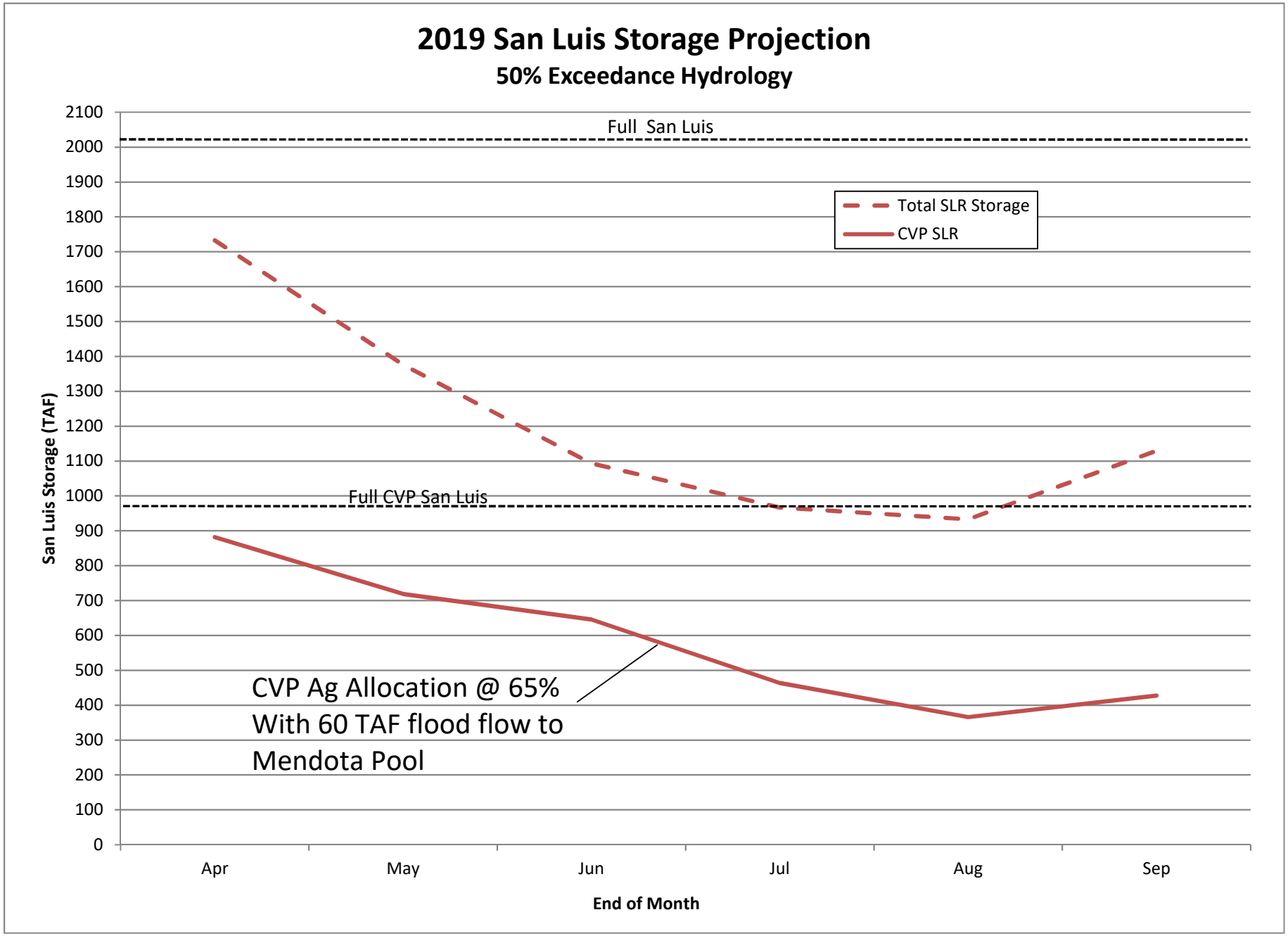
requirement through export reductions instead of making additional releases from ample storage in upstream reservoirs in an effort to minimize stranding of salmon reds and out-migrating salmon. Having a significant export cut in the fall could reduce the chances of refilling CVP San Luis next spring.

- CVP demands were about 180 TAF during April; about 20% more than the 15-year average.

2019 San Luis Operations and Allocation Projection

The current ag service and urban allocation of 65% and 90% was based on very conservative estimates of contractor demands, low pumping during May, no flood flows to the Pool, and maximum Jones pumping June through August. Given the uncertainties related to May pumping and flood flows, the assumptions pertaining to CVP supply appear reasonable. However, Reclamation's projected demands are significantly high and are reflective of an ag service and urban allocation of 80% and 100%, respectively.

The attached charts of projected San Luis storage allocation show that, under 90% exceedance conditions, CVP San Luis will have at least 250 TAF at the end of August if the current allocations are not increased. If Reclamation were to increase the ag service and urban allocation to 80% and 100% to match their demand assumptions, CVP San Luis storage would be better managed such that by the end of August CVP storage would be near its usual target of 80-100 TAF. Efforts to persuade Reclamation to increase the allocations will continue.



T. Boardman, WWD
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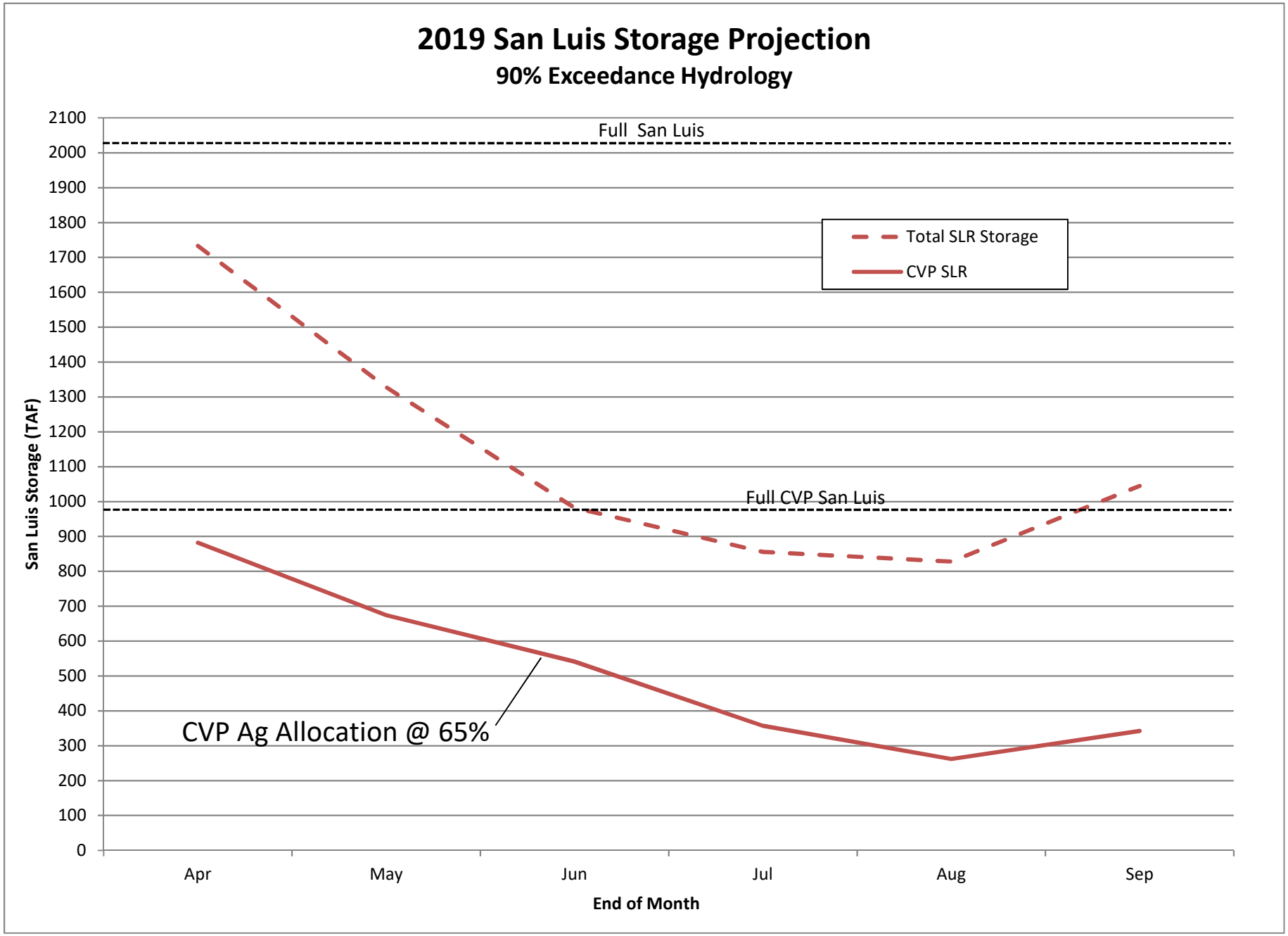

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