

WINEVILLE BASIN PROOF OF CONCEPT PROJECT Final Project Report Summary

The Wineville Basin Proof of Concept (POC) was an investigative project that consisted of six cells designed to test and evaluate percolation rates at strategic locations throughout the basin. The test cells were excavated at different depths to allow the project to gather percolation data for soils above and below the previously identified clay layer.

The project measured infiltration rates ranging from 0.13 to 1.31 feet per day (ft/day) as shown in Figure 1. Based upon estimated full scale basin performance, two likely scenarios were evaluated in the Final Report to help quantify the potential volume of additional storm and supplemental water (imported and recycled) recharged into the basin annually. Refer to Table 1 for the estimated basin performance scenarios.

The recharge projections assume minor basin grading and the construction of a flow control outlet structure. The modifications are consistent with the improvements identified in the Recharge Master Plan Update (RMPU), Project ID 23a per Table 8-2c. The capital cost for the Wineville Basin expansion is estimated between \$4.9 to \$6.3 million.

Table 1 - Projected Basin Performance Summary in Acre-Feet per Year (AFY)

Scenario	Infiltration Rate	Stormwater Recharge	Supplemental Water Recharge	Total Annual Recharge
No. 1	0.13 ft/day	820 AFY	940 AFY	1,760 AFY
No. 2	0.24 ft/day	2,080 AFY	1,750 AFY	3,830 AFY

Figure 1 - Infiltration Rate Summary by Test Cell

