

FAQ: Sites Reservoir Diversion

How much water could be diverted into Sites Reservoir from the recent storms if the reservoir existed today?

As of February 1, using simplified diversion criteria, **about 340 thousand acre-feet** could have been diverted to Sites Reservoir this water year, which began October 1, 2014. This is about 19% of the total capacity of Alternative C and 27% of Alternative A.

Our simplified diversion criteria makes two hydrologic condition checks:

1. Delta Status: if the Delta is in "excess" according to DWR's Operations Control Office.
2. Sacramento River Flow: if the flow of the Sacramento River at Wilkins Slough is greater than the required minimum.

If both criteria are met, then diversions would be possible. The above diversion criteria data are available online from DWR through CDEC and the Operations Control Office. This calculation assumes that all three conveyance options would be used, assuming Alternative A or C. Alternative B diversion would be reduced by the amount that could be diverted through Delevan Pipeline, about one third of the diversion capacity. The daily diversion capacities are:

Tehama-Colusa Canal	4,158 Acre-Feet/day
Glenn-Colusa Canal	3,564 Acre-Feet/day
Delevan Pipeline	<u>3,960 Acre-Feet/day</u>
Total Diversion to Sites	11,682 Acre-Feet/day

For the December 2014 storms, excess Delta conditions began December 9th and ended January 14th 2015. During that 37 day period, diversions were limited for 17 days (conceptually) due to Sacramento River minimum flow required at Wilkins Slough – diversions were allowed, but not at full capacity. For reference, the last rainfall in Sacramento was December 24th and the last greater than 0.1 inch per day was December 19th. This result demonstrates that Sites Reservoir does not fill quickly during a storm, but does take advantage of the relatively long high flow conditions that occur for extended periods after storms.

However, it is important to emphasize that the performance of Sites Reservoir during drought is not necessarily best measured by ability to divert during a drought period. As with most large storage systems, the drought performance is better determined by the amount of water in storage before a drought begins and then how quickly storage is depleted during the drought period. Performance during drought is described in "The Drought and Sites Reservoir FAQ."