

The following questions and answers are meant to respond to common questions about Sites Reservoir.

**Since Sites only receives water when there is “surplus” flow in the Sacramento River, how long is it projected now before the reservoir is full under “normal” precipitation patterns?**

In California water there is no “normal” water year. If we look at 82 years of past hydrology analyzed using standard models and methods, it would take, on average, approximately five to seven years for the reservoir to fill completely on first fill. In contrast, in a single water year like 2016-2017 it would have been possible to fill the reservoir in that one year. Similarly, if a string of dry years were to occur, it would take longer to fill, maybe as much 10 years. Surprisingly, there tends to be “surplus” flow in the river in all years. Even in dry and critically dry years, there would be filling opportunities, albeit fairly limited.

The original construction of Los Vaqueros Reservoir in Contra Costa County provides a real-life example of the possible variability in fill rates. The first fill of the 100,000 acre-foot reservoir was expected to take five to seven years. However, the first year of operation was 1997-1998, a fairly wet year of high-quality water being available at the intakes, which allowed the reservoir first fill to be completed in just two years.

**How much above the statistical normal for rainfall in the region does rainfall have to be for Sites to receive “surplus” water from the Sacramento River?**

Sites is designed to divert water through existing state-of-the-art fish screens only when actual flows on the Sacramento River exceed that needed by more senior water right holders, the Delta is in “excess” conditions, and based on stringent criteria to protect aquatic resources. Sites primarily diverts flows into the Sacramento River from streams and creeks downstream of Shasta/Keswick Dams. The exception is that Sites could pick up water that gets released from these dams under flood control conditions. The operations modeling typically conducted for water projects does not rely on rainfall statistics. Instead, model simulations (CalSim) calibrated to actual flow conditions for an 82-year period covering 1921-2003 are overlaid with current permit and operating constraints to evaluate with project conditions. The nice thing about this approach is that you can simulate future with climate change conditions which has been done for the Sites Project. The results of these with climate change simulations demonstrate that the performance of the project actually improves 5 to 10 percent with climate change. This is good for all of the project partners including the state and federal governments which are approximately 25% shareholders for environmental purposes. We suspect that someone has correlated the historical hydrology in CalSim and rainfall, but we are not aware of any project effects analysis being based on rainfall conditions alone.

**And, given the underlying complexity of these questions, where could an analyst wanting to do a very deep dive on these key risk questions find the hard data needed?**

The Sites Project is reissuing an environmental document for the project in early November 2021 for a 60-day review period with a posting in the federal register scheduled for November 12. This document includes the modeling results discussed above. Also, two public meetings to review the document and receive public comments are being scheduled. Watch the Sites website for announcements and notices at [www.sitesproject.org](http://www.sitesproject.org).

