During most years, storage in Shasta Reservoir varies from about 3.25 million acre-feet during the late fall to early spring, to as much as 4.55 million acre-feet the remainder of the year. The 1.3 million acre-feet difference in storage is the maximum space reserved for flood control. During about 1 of every 3 years, Shasta Reservoir reaches full storage capacity, and can be significantly drawn down during drought periods.

Raising Shasta Dam would not change this pattern of fill and drawdown. In most years, storage in the enlarged reservoir would vary by the same 1.3 million acre-feet, only at higher elevations. Similar to under current conditions, the reservoir would fill to capacity in about 1 of every 3 years, and only be drawn down during drought periods.