

CALIFORNIA WATER FIX

EXAMPLE EFFECT OF CALIFORNIA WATER FIX ON UPSTREAM RESERVOIR STORAGE



AUGUST 31, 2016

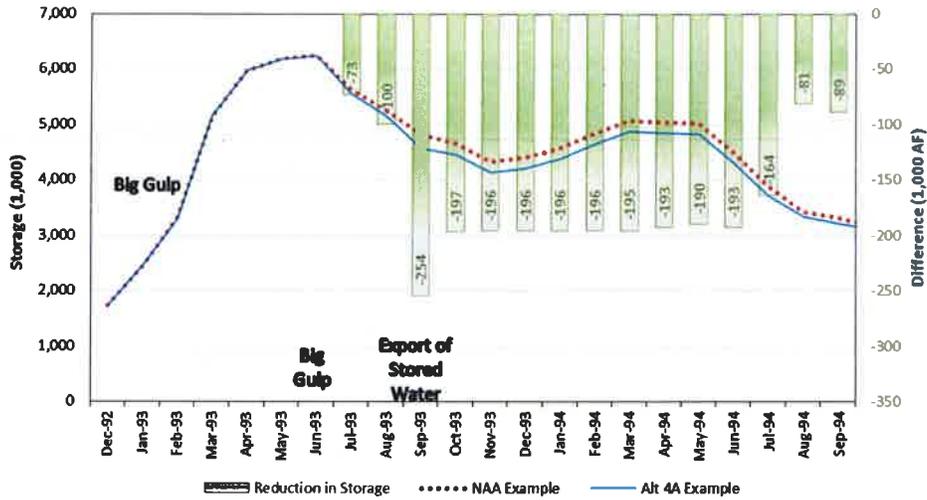


Figure 4. Combined Shasta and Trinity Reservoir Storage

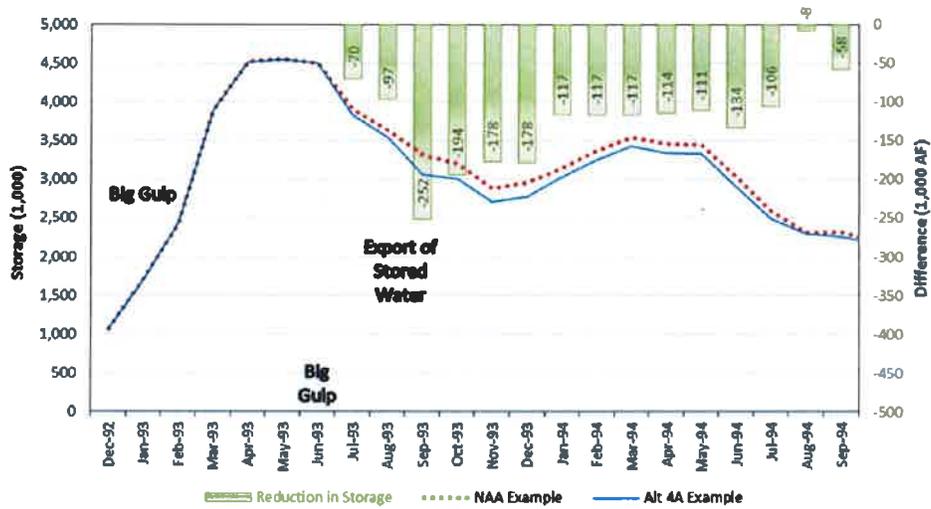


Figure 5. Shasta Reservoir Storage

Figure 6 shows modeled Folsom Reservoir storage for the NAA and Alternative 4A. Folsom Reservoir storage is 71 TAF lower at the end of 1993 under the Alternative 4A scenario than under the NAA, and is about 35 TAF lower in the spring of 1994. Figure 7 shows that modeled Oroville Reservoir storage is 132 TAF lower in the spring of 1994 under the Alternative 4A scenario than under the NAA.

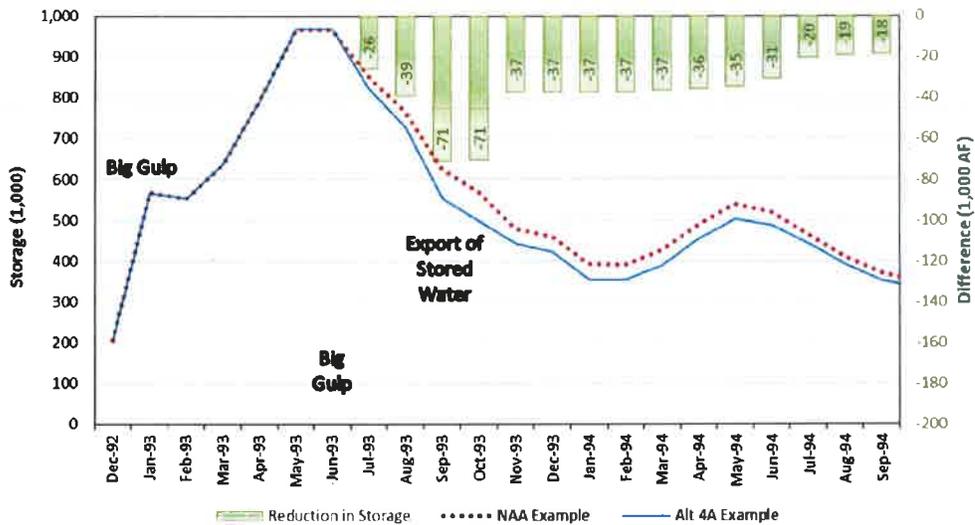


Figure 6. Folsom Reservoir Storage

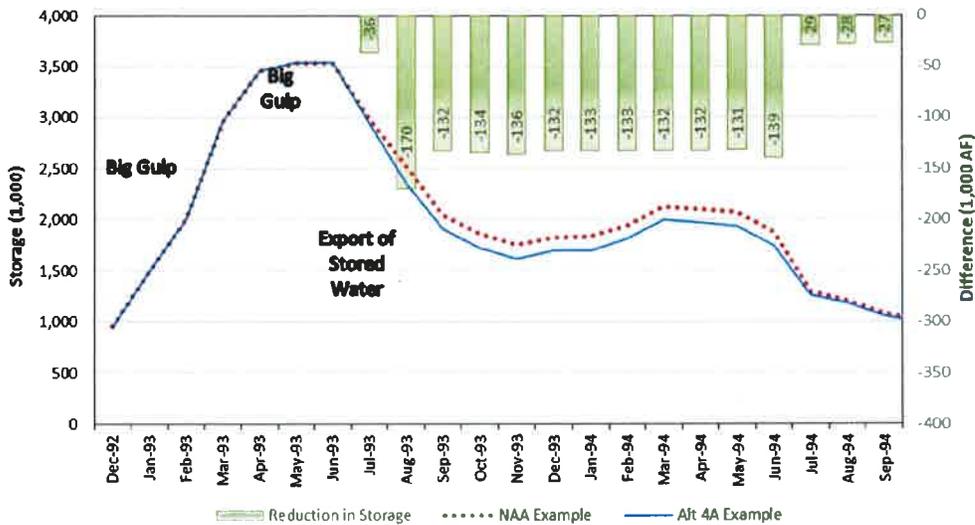


Figure 7. Oroville Reservoir Storage

In this comparative example, the NAA CVP NOD agricultural water service (Ag service) contract allocation is 100 percent and the CVP SOD Ag service contract allocation is 65 percent. CVP policy is to maintain equal allocations between NOD and SOD contractors, except when limitations on the ability to convey water SOD result in lower allocations to SOD contractors. Lower CVP SOD allocations, as compared to CVP NOD allocations in the NAA, indicate a limitation on the ability to convey water SOD in 1993, not a limitation on the available water supply. For the Alternative 4A scenario, the NDD provides additional export capacity to the CVP through Banks Pumping Plant, and the use of Joint Point of Diversion. This additional export capacity would be considered in the spring when CVP allocation

decisions are made, and would allow for CVP SOD Ag service contract allocations of 90 percent with the CWF.

A similar effect occurs in the modeled SWP operations under the NAA and the Alternative 4A scenario. Modeled SWP Table A allocations increase from 69 percent under the NAA, to 86 percent under the Alternative 4A scenario, due to the additional capacity that the NDD would provide to convey water released from storage in Oroville Reservoir through the Delta to SOD SWP Table A contractors.

Table 1 summarizes CVP and SWP allocations for both the NAA and Alternative 4A (labeled as CWF) scenarios for both CVP and SWP contractors.

Table 1: Change in CVP and SWP Contract Allocations

| | | 1993 | | | 1994 | | |
|-----------------------|-----|------|------|------------|------|-----|------------|
| | | NAA | CWF | Difference | NAA | CWF | Difference |
| CVP South of Delta | Ag | 65% | 90% | 25% | 25% | 20% | -5% |
| | M&I | 90% | 100% | 10% | 75% | 70% | -5% |
| CVP North of Delta | Ag | 100% | 100% | 0% | 25% | 20% | -5% |
| | M&I | 100% | 100% | 0% | 75% | 70% | -5% |
| SWP Table A | | 69% | 86% | 17% | 41% | 33% | -8% |

Conclusions

The CVP and SWP could use the additional export capacity that would be provided by CWF through the NDD to release additional amounts of water from NOD CVP and SWP reservoir storage and to export this water from the Delta. As shown in Figure 3, the scenarios described in this memorandum for 1993 show that such additional releases and exports resulted in modeled carryover storage in NOD CVP and SWP reservoirs at the end of 1993 being 457 TAF lower under the Alternative 4A scenario than under the NAA. The reduction of upstream storage of 360 TAF in the spring of 1994, of which about 200 TAF would be from the Shasta/Trinity system, would make it more difficult for Reclamation to meet the temperature standards contained in the BiOp RPAs. It is likely Reclamation would attempt to satisfy those RPA standards before allocating water to its water contractors. Even if Reclamation were to eliminate all releases for export to SOD water service contractors and delivery to NOD water service contractors, it would still be more difficult to meet the RPA standards and also make adequate water available to the Sacramento River Settlement Contractors as required under their contracts.