

# **Developments after Publication of the Proposed Final Environmental Impact Report**

July 2017

**EXHIBIT BKS-253**

the additional habitat restoration under the proposed project would not substantially increase the severity of the impacts identified in the Final EIR/EIS. Importantly, the original impact was significant and unavoidable, and the new impact still fits that description, though the amount of acreage has increased somewhat. In addition, Mitigation Measures UT-6a, UT-6b, and UT-6c would be available to reduce the severity of these impacts, though not to less than significant/not adverse levels. In light of these considerations, impacts of the proposed action would be consistent with the findings in the Final EIR/EIS.

Notably, moreover, even this increased level of impact on public services, as it relates to relocation of utility infrastructure, is relatively modest compared with the level of impacts that could occur under many other alternatives addressed in the Final EIR/EIS. For example, Alternative 4, from which Alternative 4A was derived, included substantially increased large-scale, long-term restoration, which would be projected to lead to greater potential for relocation of utility infrastructure. (See Final EIR/EIS, Chapter 20, pp. 20-133.) This level of impact would occur under several other alternatives from the Draft EIR/EIS, many of the alternatives contemplated approximately the same amount of habitat restoration as Alternative 4. (See, Table 3-4, Chapter 3 of the Final EIR/EIS.) It is indisputable, then, that the increased level of impact associated with Alternative 4A as modified by the June 2017 USFWS Biological Opinion is well within the range of impacts described within the broad range of alternatives addressed in the Final EIR/EIS.

In summary, the relatively modest increase in the severity of the originally-identified impact does not require recirculation, as the new information regarding the somewhat heightened level of impact has not “deprive[d] the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.” (State CEQA Guidelines Section 15088.5[a].) The underlying impact for Alternative 4A was discussed in the publicly-circulated RDEIR/SDEIS, and the additional acreage associated with the increased need for delta smelt habitat has not triggered any new or different mitigation.

## **Operations**<sup>3</sup>

### **Overview of changes in the Proposed Action Modeling Assumptions**

Operations criteria for the California WaterFix Biological Opinions and draft 2081(b) ITP proposed action were developed based on the feedback from the fishery agencies on the ESA Section 7 Biological Assessment and the draft 2081(b) permit application. The proposed action includes an increase in the Delta outflow requirements in the spring months and a change in the

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<sup>3</sup> Note that the following operations section does not assess effects for every resource area analyzed in the Final EIR/EIS, but rather evaluates changes in key hydrological parameters, as well resource areas directly related to operations and hydrological conditions. Nevertheless, other resource areas which may be indirectly affected by changes in operations (*e.g.*, recreation on upstream reservoirs and in the Delta) would see similar conditions under the proposed action, relative to Alternative 4A, due to the over similarity in hydrological conditions under both scenarios (see analysis below).

south Delta export constraints in the fall months compared to the Final EIR/EIS Alternative 4A project description. Other than these two changes, modeling assumptions for Alternative 4A remained unchanged.

Changes to spring outflow requirement: In the Final EIR/S and in the BA, operational criteria included a spring outflow requirement, which required maintaining the March through May average Delta outflow that would have resulted because of export restrictions under the 2008 and 2009 biological opinions, in the absence of the California WaterFix. In the modeling included in the Final EIR/EIS and the BA, this requirement was achieved via constraining the total Delta exports in April and May per the 2009 NMFS BiOp San Joaquin River Inflow-Export Ratio (SJR i-e) constraint. For the proposed action modeling, in addition to the above restriction, an additional outflow requirement was added for March. The outflow requirement is dependent upon the hydrologic conditions in March (eight river index), as shown in the table below. Delta exports are curtailed to no less than 1500 cfs, if needed to meet the March outflow requirement. In addition, for April and May, the SJR i-e ratio constraint was removed if the Delta outflow was higher than 44,500 cfs.<sup>4</sup>

Changes to south Delta export constraints: In the Final EIR/EIS and in the BA, operational criteria included additional Old and Middle River (OMR) flow requirements and south Delta export restrictions during October and November. For the proposed action, these OMR flow requirements and the south Delta export restrictions were removed.

### **Proposed Action Modeling**

A sensitivity simulation was modeled for the proposed action using CalSim II. Key CVP-SWP operations results are presented in the Figures 1- 26. Each figure compares CalSim II results for

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<sup>4</sup> It should be noted CDFW revised the proposed spring outflow criteria to more implementable and assessable criteria. The revised spring outflow criteria from the CDFW includes Delta outflow targets for March, April and May. The outflow targets are dependent on the forecasted hydrologic conditions (50% forecast of the 8 River Index (8RI)), for each of the three months. CDFW's spring outflow criteria is expected to result in similar outflow conditions as the 2081(b) application criteria, given that the two sets of criteria are targeting a similar level of Delta outflow during March through May and, export curtailments would be the primary mechanism to achieve the outflow targets. Therefore, the revised spring outflow criteria from CDFW is not expected to result in any new effects beyond those disclosed in the Final EIR/EIS.

the No Action Alternative<sup>5</sup>, the Final EIR/EIS Alternative 4A<sup>6</sup> and the proposed action. As shown in the figures, the proposed action results for the CVP-SWP operations remain similar to Alternative 4A, with a few minor changes.

**Upstream storage:** Figures 1 through 8 compare the end of May and end of September storage conditions in Trinity Lake, Shasta Lake, Lake Oroville and Folsom Lake for the proposed action with the No Action Alternative and the Alternative 4A. As shown in the figures, the storage conditions under the proposed action are similar to Alternative 4A, and therefore, result in similar incremental changes as Alternative 4A compared to the No Action Alternative.

**Delta exports:** Annual Delta export changes under the proposed action compared to the No Action Alternative are similar to Alternative 4A under all water year types, as shown in the Figure 9. The proportion of the Delta exports at the north Delta diversion intakes under the proposed action are similar to Alternative 4A while the south Delta exports are slightly higher as shown in the Figures 10 through 12.

**CVP-SWP Deliveries:** Annual CVP and SWP deliveries under the proposed action are similar to or higher than the No Action Alternative, consistent with Alternative 4A, as shown in Figures 13 through 16.

**River flows:** Monthly average flows for different water year types are presented at key locations for Trinity, Sacramento, Feather, American and San Joaquin Rivers in Figures 17 through 24. River flows under the proposed action show negligible changes compared to

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<sup>5</sup> The following sections on operations, water quality, and fish species discuss project effects relative to future baseline conditions (*i.e.*, No Action Alternative (NAA)), rather than the Existing Conditions (EC) baseline used in the FEIR/EIS CEQA analyses. As described in Master Response 1, FEIR/EIS, although the FEIR/EIS baselines have been labeled as the CEQA and NEPA baselines, respectively, the CEQA analysis presented in the resource chapters frequently mentions the NEPA baseline in order to fully explain the results based on the CEQA baseline. Such an approach is authorized by CEQA case law, which allows CEQA lead agencies to take future conditions, such as occur under a No Project (No Action) Alternative, into account when assessing the significance of impacts under CEQA. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 454; see also Master Response 1, Environmental Baselines.) Under NEPA, the effects of sea level rise and climate change (*e.g.*, altered precipitation patterns resulting in more rain and less snow than at present) are evident both in the future condition and in the effects of the action alternatives. Under CEQA, in contrast, the absence of sea level rise and climate change in Existing Conditions results in model-generated impact conclusions that include the impacts of sea level rise and climate change in addition to the effects of the action alternatives. As a consequence, a CEQA analysis that reported these conclusions without qualification and explanation would either overstate the true effects of the action alternatives or would misleadingly suggest significant effects that are largely or exclusively attributable to sea level rise and climate change, and not to the action alternatives themselves. For these reasons, potential project effects described below are made relative to the NAA baseline to allow for a more “apples to apples” comparison in that the results of both the project and NAA include the same future assumptions (*e.g.*, sea level rise, climate change). Furthermore, the Biological Opinions/draft 2081(b) ITP analyze project effects against a future NAA baseline and not existing conditions, which makes the FEIR/EIS NEPA analyses (*i.e.*, comparisons against the NAA) more appropriate when comparing to the Biological Opinion/ draft 2081(b) ITP effects analyses. Nevertheless, this analytical approach does not affect, nor would it change, the FEIR/EIS CEQA analysis and conclusions because the CEQA determinations are largely driven by the NEPA analyses, particularly in the aquatic resource chapters.

<sup>6</sup> No Action Alternative and Alternative 4A results used in this analysis are the NAA and the PA scenarios from the CWF Biological Assessment, respectively; these results were presented in the Final EIR/EIS Appendix 5G.

Alternative 4A, indicating that the incremental changes in flows compared to the No Action Alternative would remain similar under both cases.

OMR flow: As shown in Figure 25, Old and Middle River flows under the proposed action are nearly identical to the Alternative 4A in all months except October and March. The OMR flows in October under the proposed action are slightly more negative compared to the Alternative 4A, while slightly more positive during March. These are expected changes because of the changes in the OMR and spring outflow criteria. Even with these changes the OMR flows under the proposed action are predominantly less negative or more positive than the No Action Alternative, consistent with Alternative 4A.

Delta outflow: Figure 26 compares the monthly average Delta outflow results for the proposed action to the No Action Alternative and Alternative 4A. Similar to the OMR flows, Delta outflow results differ between the two scenarios in October and March. October outflow is slightly lower under the proposed action while the outflow is higher in March, compared to Alternative 4A. However, October outflow under the proposed action remains similar to the No Action Alternative. Delta outflow remains nearly identical in other months under the two scenarios in all water year types.

### **Proposed Action Impact Assessment**

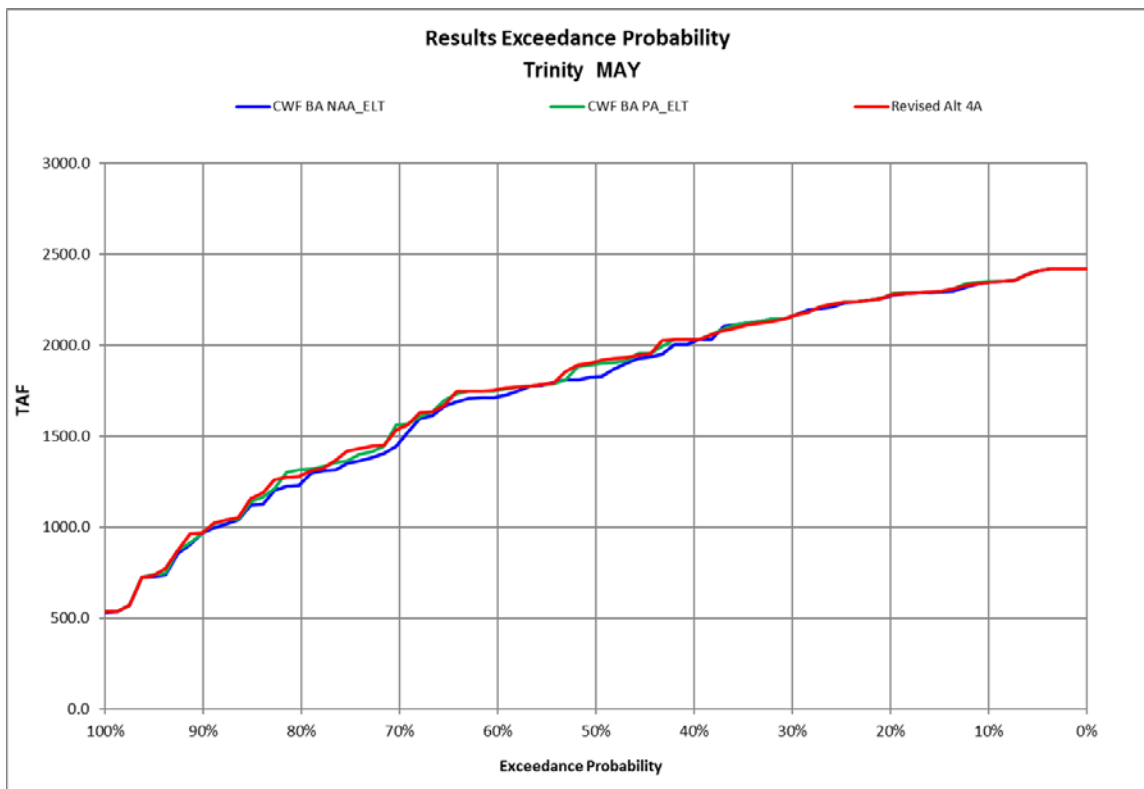
Based on the results from the sensitivity simulation, proposed action impacts were assessed for water supply, surface water, fish and aquatic resources, and groundwater resources. The incremental changes under the proposed action compared to the No Action Alternative are assessed below.

Water Supply: For water supply, consistent with Alternative 4A, the proposed action would not impact water operation of existing SWP or CVP facilities during construction of the water conveyance facilities. As summarized above, SWP and CVP deliveries modeled under the proposed action remain similar or higher compared to the No Action Alternative, consistent with the Final EIR/EIS Alternative 4A. Given that the proposed action includes identical facilities, and similarity in the export operations compared to Alternative 4A, the findings on water transfers effects for Alternative 4A are applicable to the proposed action. Therefore, the water supply impact conclusions for the proposed action are expected to remain consistent with Alternative 4A.

Surface Water: For surface water resources in the Final EIR/EIS, changes in reservoir storage, river channel flows, and the potential for floods was assessed along with the expected changes in OMR flows. As summarized above, the end of May and end of September reservoir storage conditions for the proposed action remained similar to the Alternative 4A. Therefore, it is expected that the effects of the proposed action on storage in Shasta Lake, Folsom Lake, and Lake Oroville would be similar to those under the No Action Alternative, consistent with Alternative 4A. The summary of flow changes at key river locations indicates that the proposed action is similar to Alternative 4A on a long-term average basis and in the wet years, when high flows occur. Therefore, the proposed action would not result in an increase in potential risk for flood management compared to the No

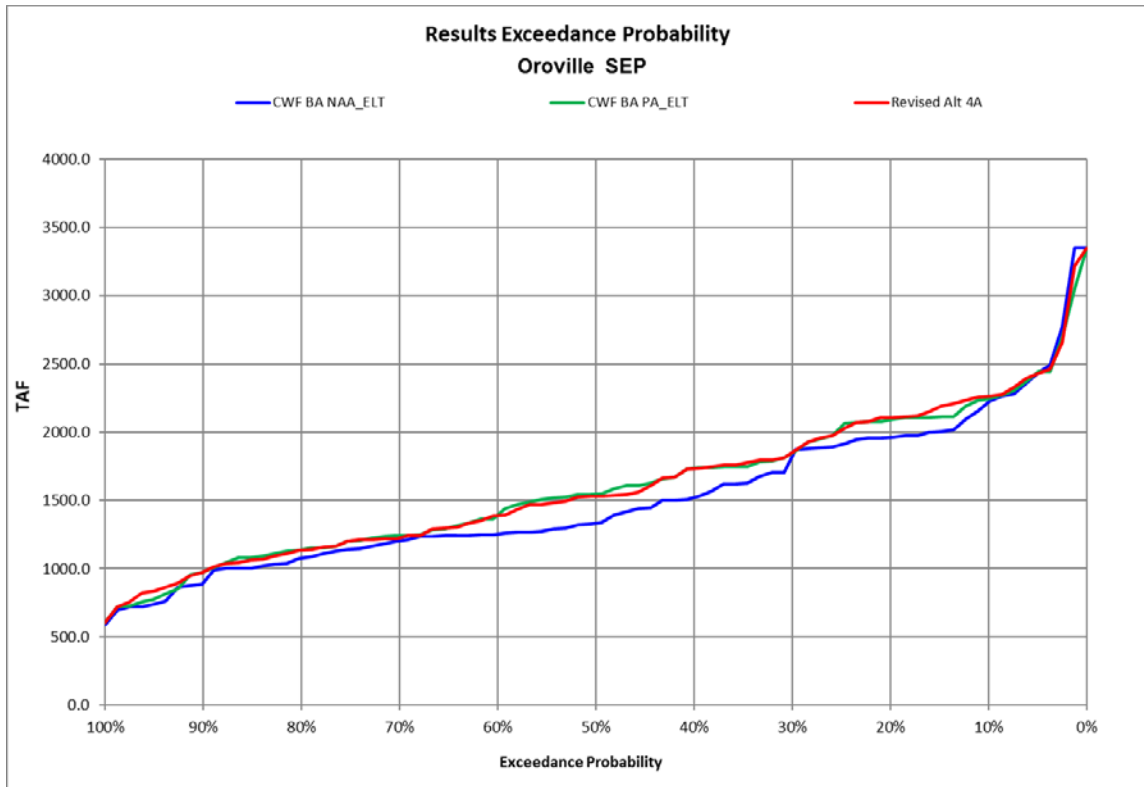
differences in October and November<sup>7</sup>, though population level effects are not expected and these differences would not affect the Final EIR/EIS impact determinations. See Section 5.1.1.2.1 below for a discussion on the Delta smelt habitat analyses included in the Biological Opinions/ draft 2081(b) ITP and actions to address Delta smelt rearing habitat conditions. Overall, modeled hydrological conditions under both the proposed action and Alternative 4A are similar; therefore, additional impacts are not expected and no mitigation outside of what has already been included in the Final EIR/EIS is necessary.

Based on the results from the sensitivity analysis, water supply, surface water, fish and aquatic resources and groundwater resource impacts for the proposed action are expected to be within the range of impacts identified for Alternative 4A in the RDEIR/SDEIS, and confirmed in the Final EIR/EIS.

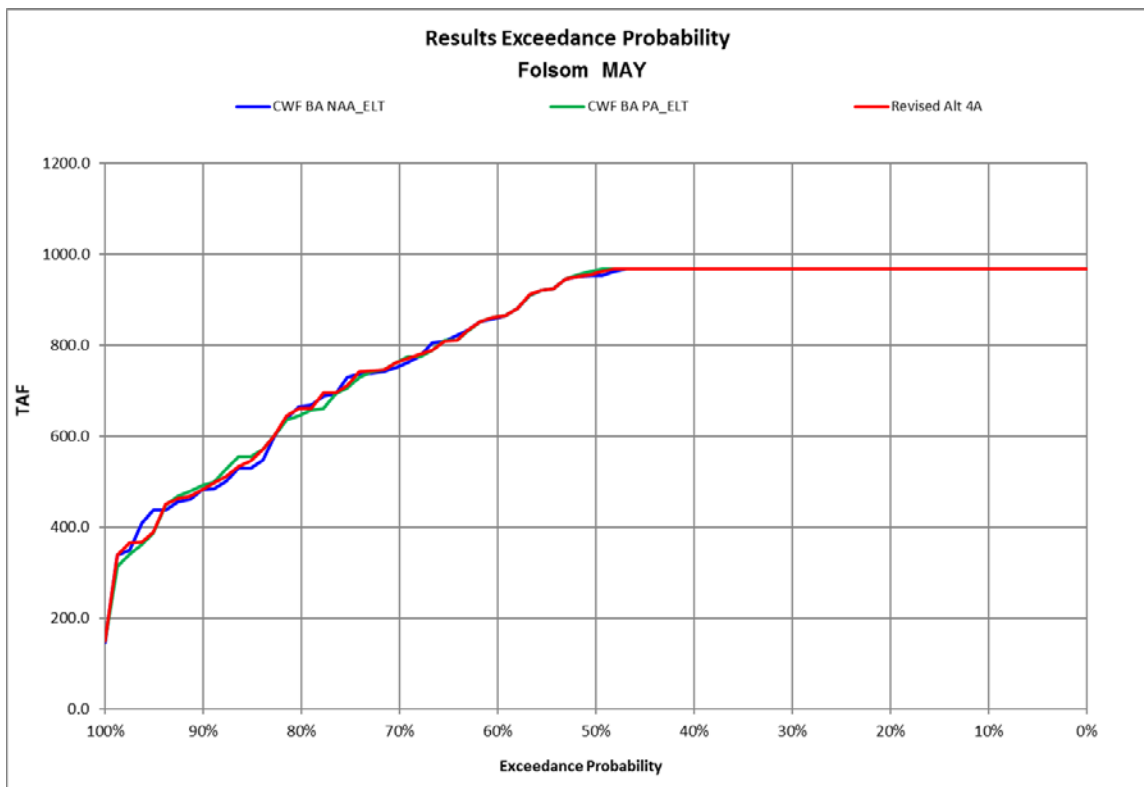


**Figure 1. Storage Exceedance Probability for Trinity Lake, End of May**

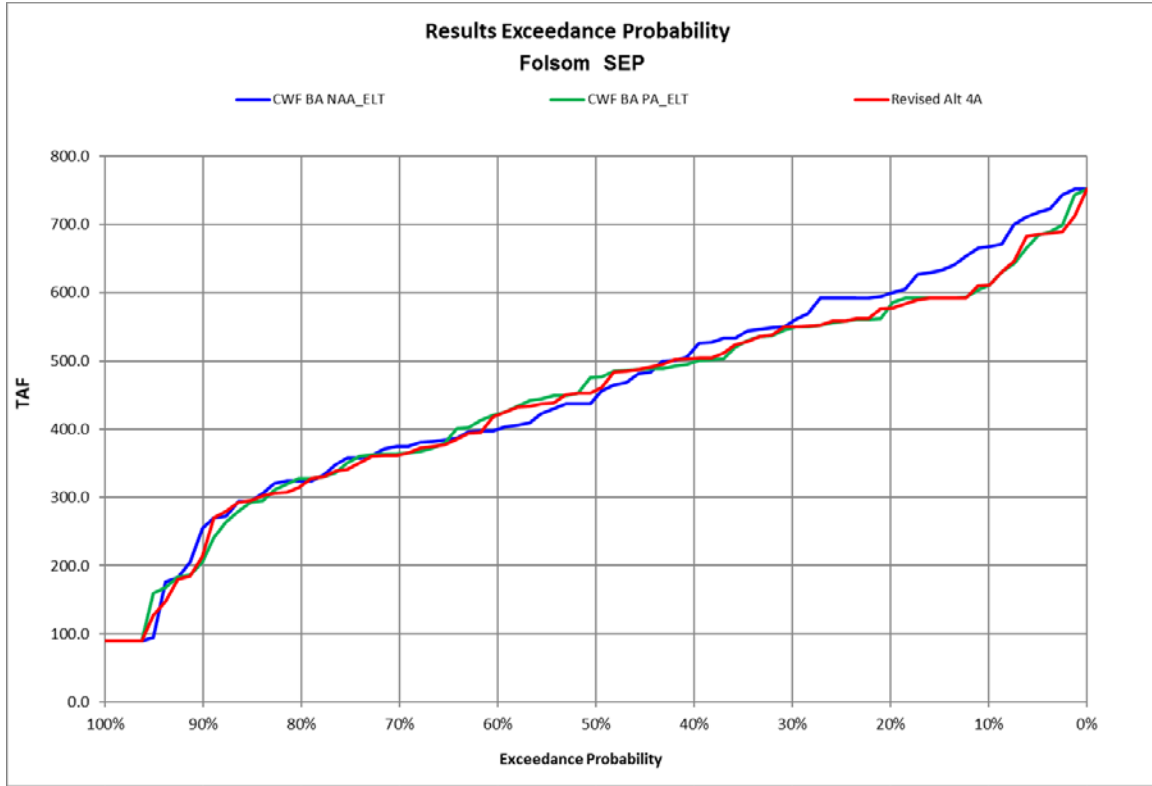
<sup>7</sup> Note that in “Comparison of Key Hydrological Variables for Proposed Action with Longfin Smelt Spring Outflow Criteria/No Scenario 6 October-November Old and Middle River Flow Criteria to No Action Alternative and BA Proposed Action Scenarios” the differences are shown to be in November and December because the previous month’s X2 is reported.



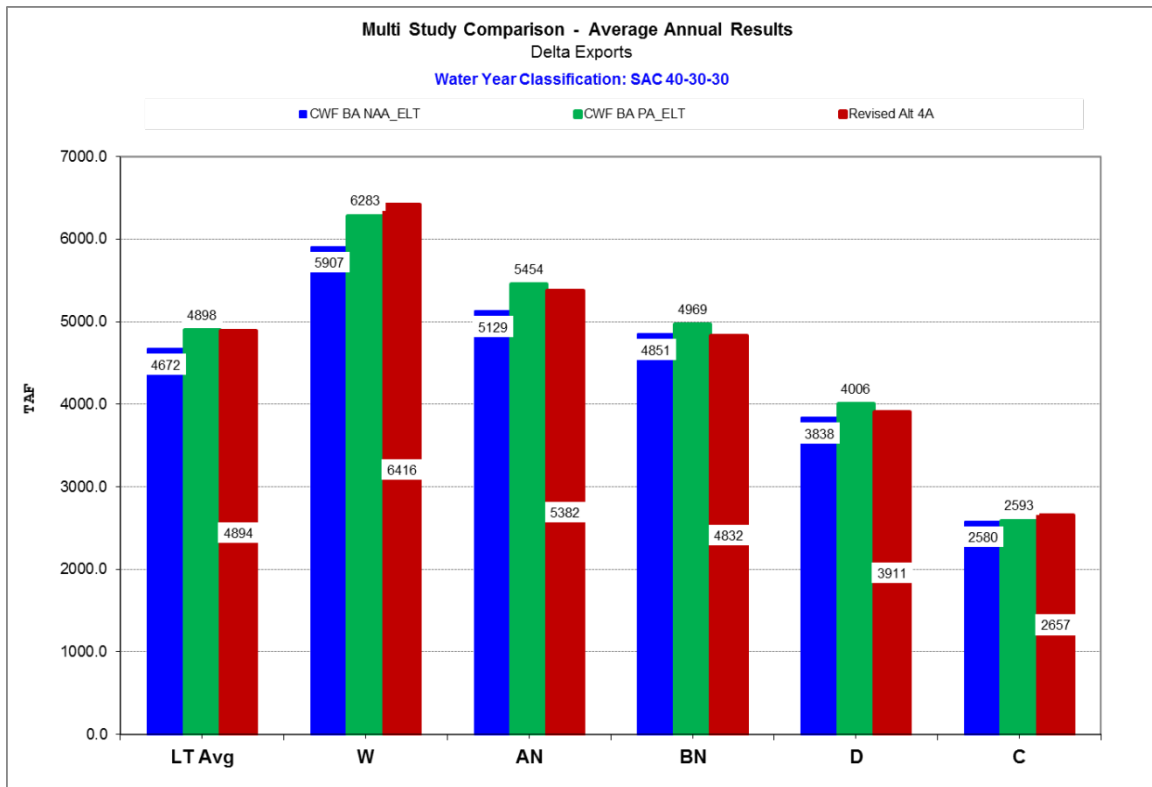
**Figure 6. Storage Exceedance Probability for Lake Oroville, End of September**



**Figure 7. Storage Exceedance Probability for Folsom Lake, End of May**



**Figure 8. Storage Exceedance Probability for Folsom Lake, End of September**



**Figure 9. Annual (Oct-Sep) Delta Exports by WYT [WYT per current climate]**



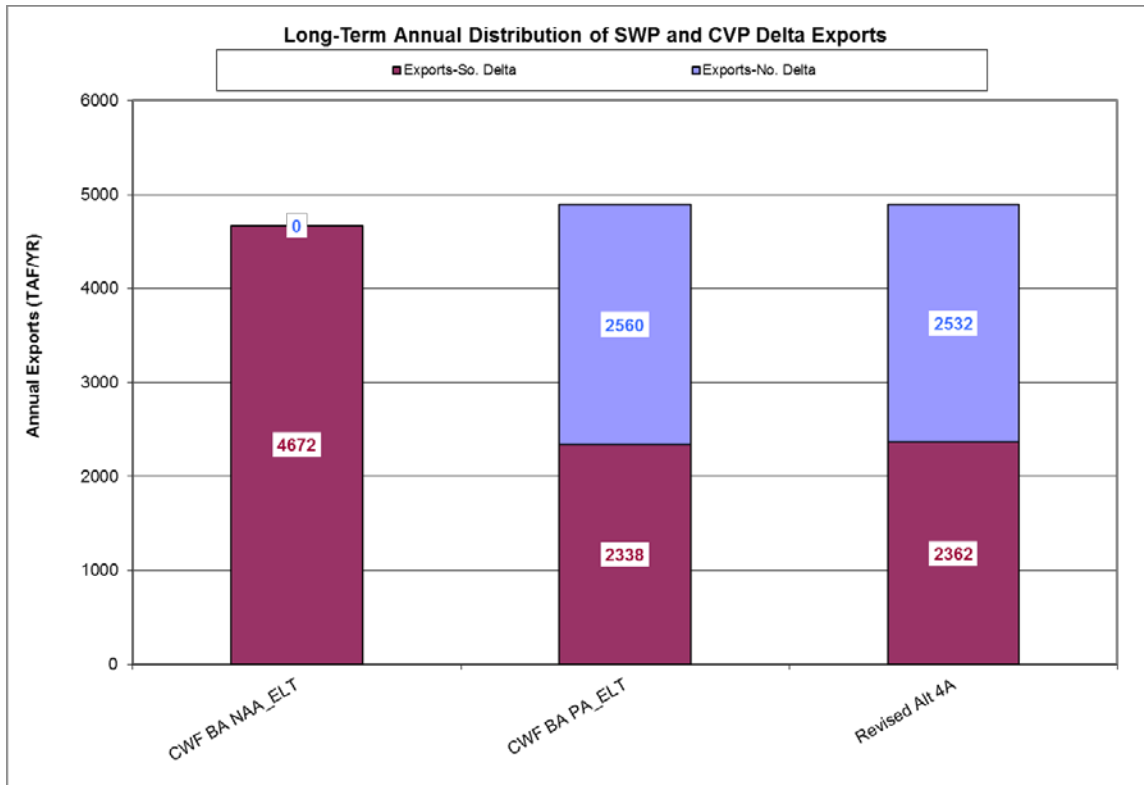


Figure 12. Long-term Annual Distribution of Delta Exports at North and South Delta Intakes

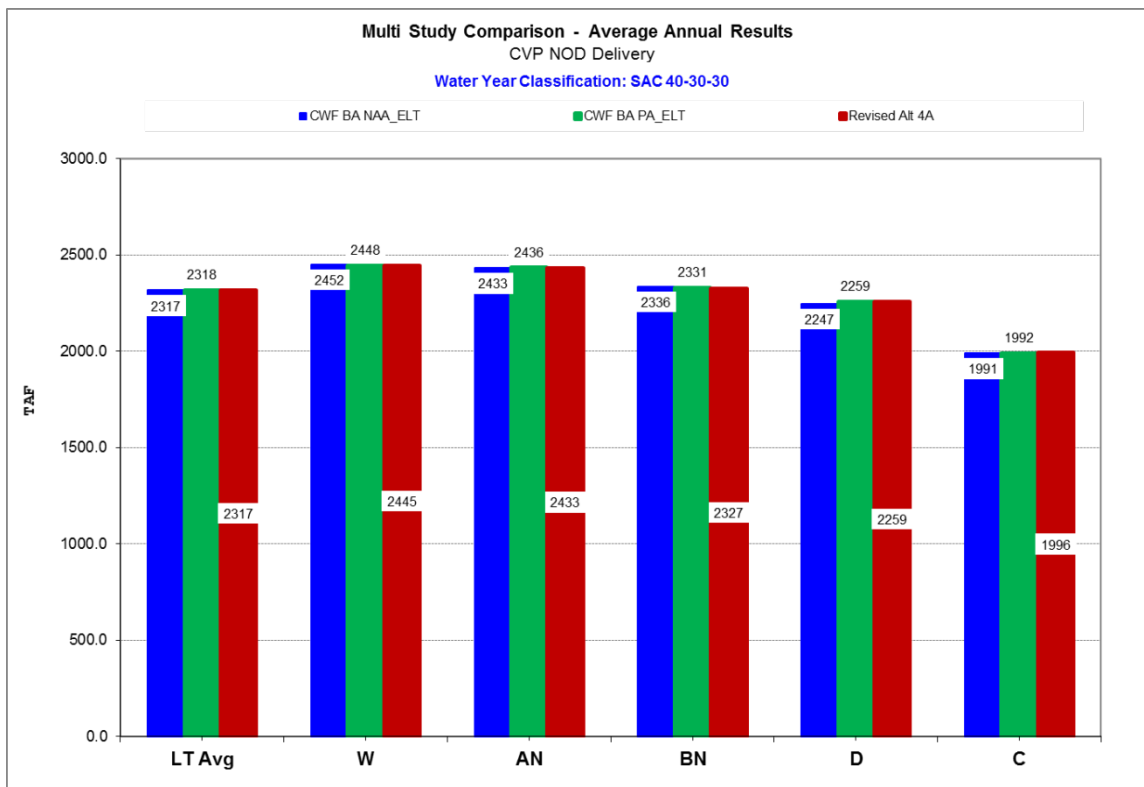


Figure 13. Annual (Oct-Sep) CVP North-of-Delta Deliveries [WYT per current climate]

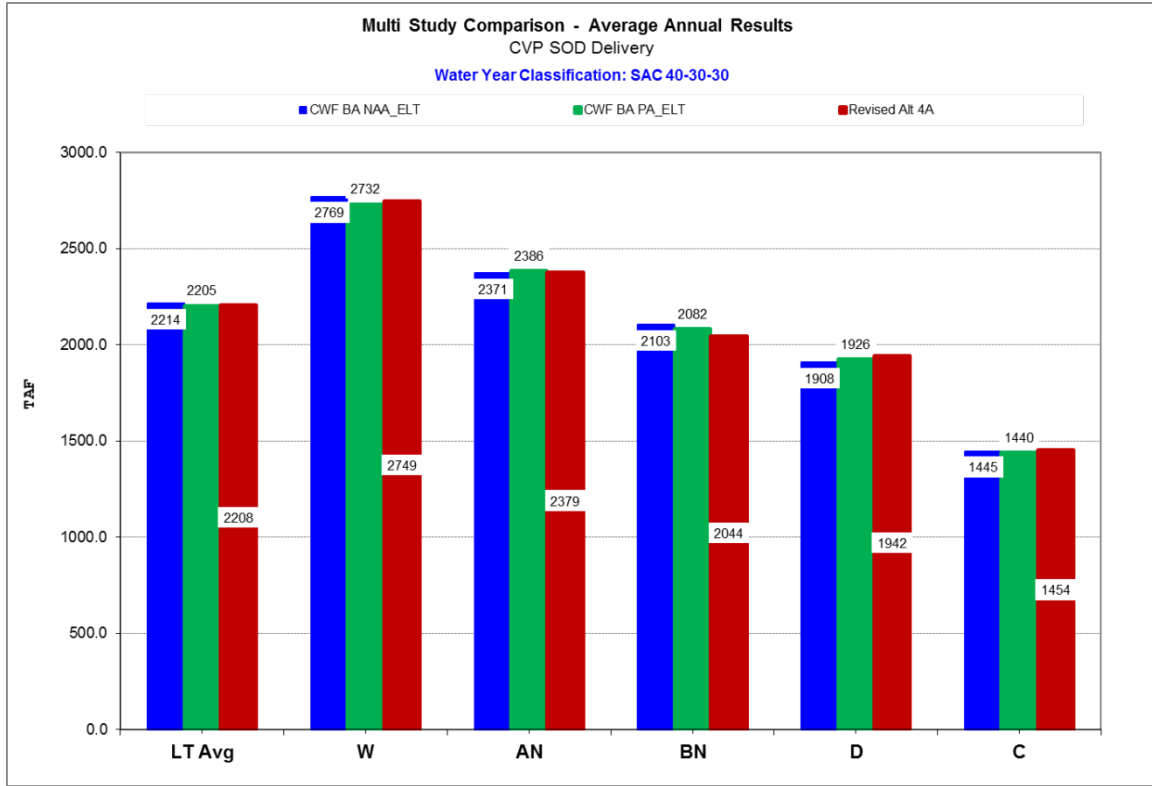


Figure 14. Annual (Oct-Sep) CVP South-of-Delta Deliveries [WYT per current climate]

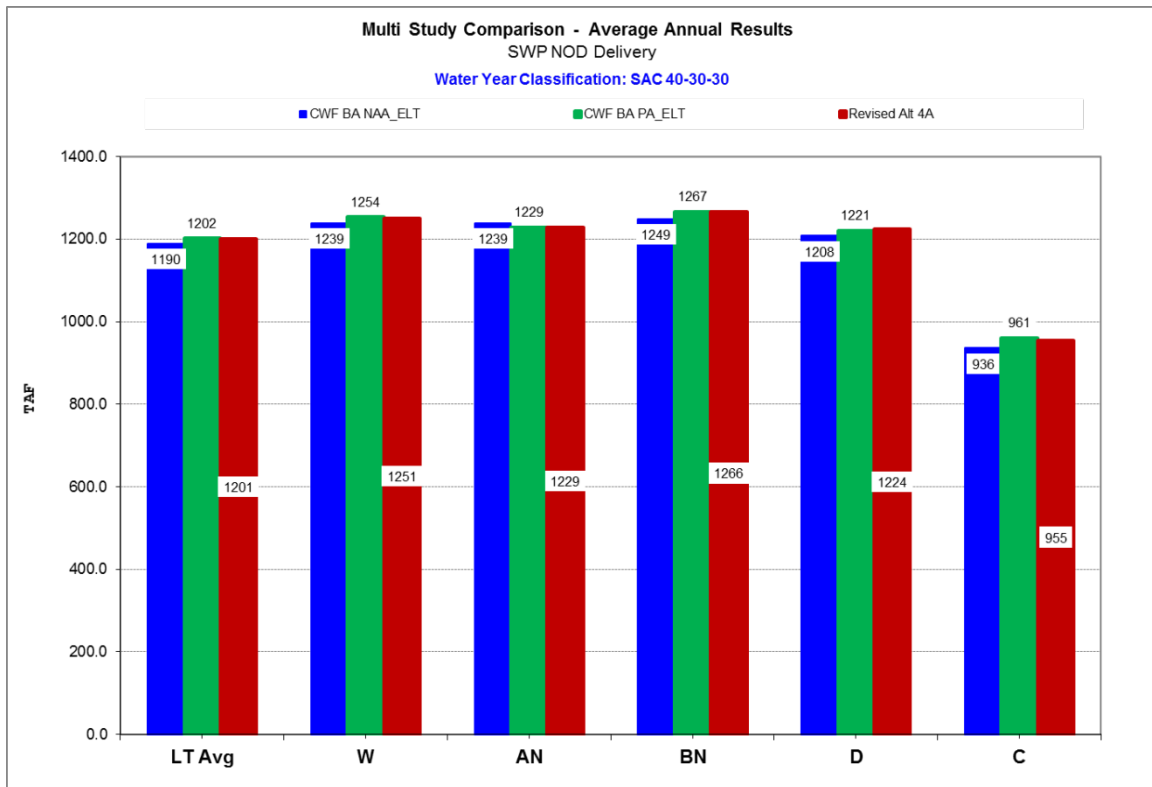
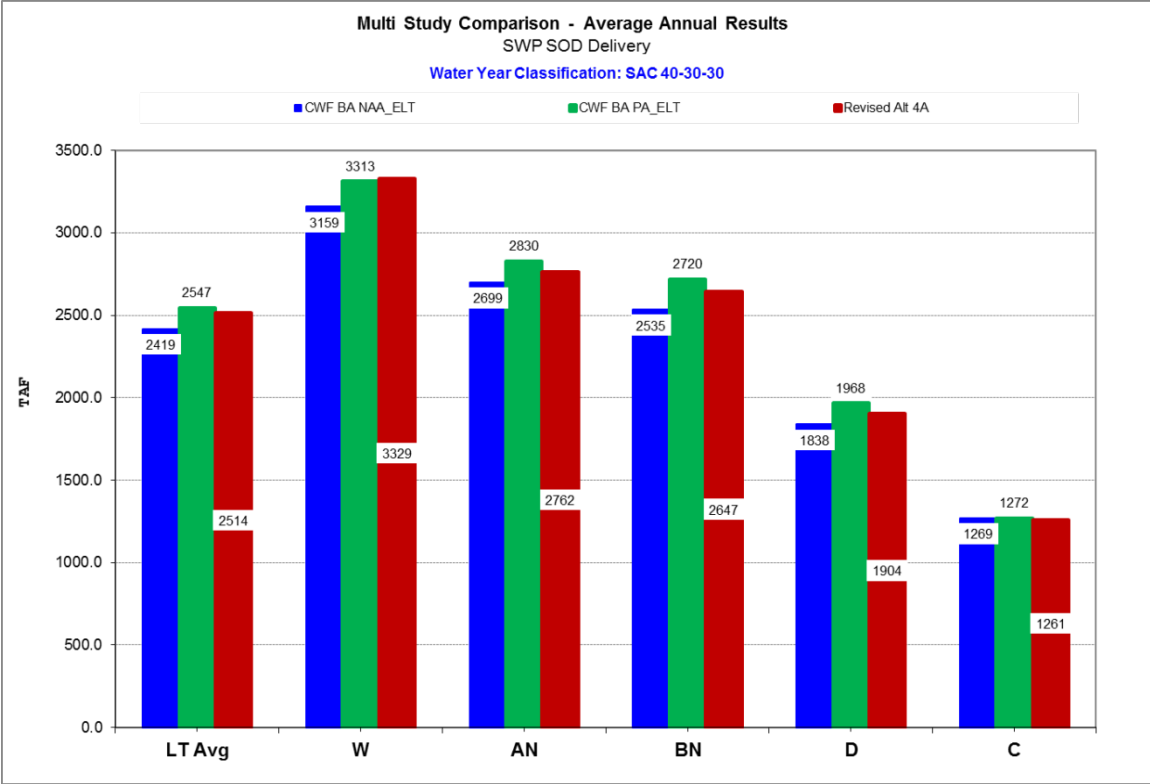
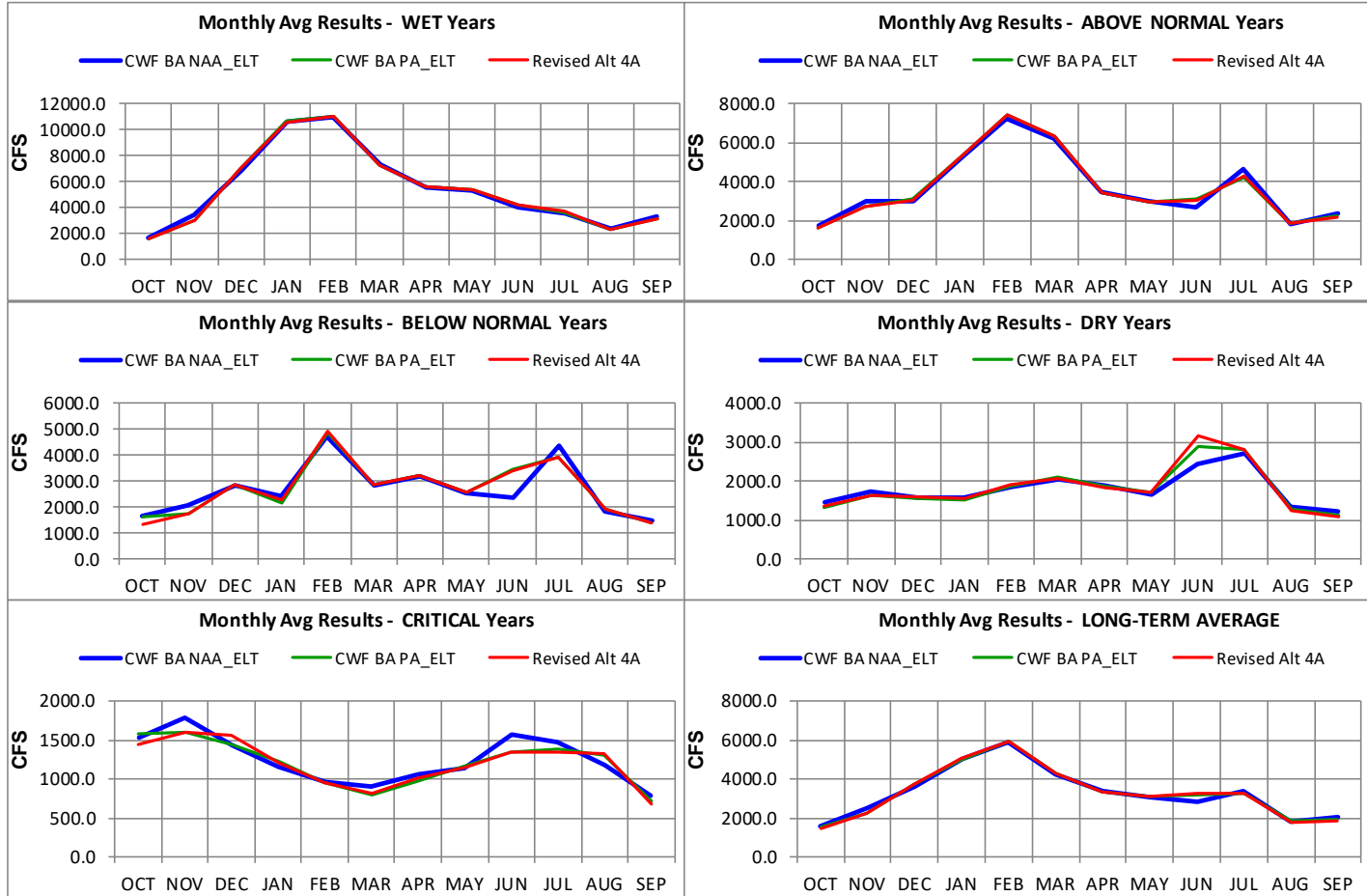


Figure 15. Annual (Oct-Sep) SWP North-of-Delta Deliveries by WYT [WYT per current climate]



**Amer R @ Nimbus**  
 Water Year Classification: SAC 40-30-30



**Figure 21. American River below Nimbus, Monthly Average Flow [WYT based on current climate]**