Appendix 5F

Comparison of FEIRS Alternatives 2D, 4A, and 5A Modeling Results to RDEIR/SDEIS Modeling Results

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5F.1 Introduction

The BDCP/CWF RDEIR/SDEIS included three new sub-alternatives, Alternatives 4A, 2D, and 5A, to ensure a reasonable range of alternatives was considered that adopt the alternative implementation strategy to achieve federal and state endangered species act compliance using a shorter project implementation period through the "Section 7" process under the federal ESA, and the "Section 2081(b)" process under CESA. These new sub-alternatives were compared to the No Action Alternative at Early Long-Term (ELT), in addition to the Late Long-Term (LLT) timeframe where the DEIRS Alternatives were used to analyze the CEQA/NEPA effects. ELT timeframe represents about year 2030, and the Alternatives and the No Action Alternative evaluated at ELT assumed to include projected climate change effects and a sea level rise of 15 cm. Appendix 5A includes a detailed description of the ELT and LLT assumptions, and the approach used to account for the climate change and sea level rise effects.

Given the similarities between the RDEIR/SDEIS new sub-alternatives and the DEIRS Alternatives, DEIRS modeling results were used as a surrogate to perform the impact analyses for the RDEIR/SDEIS new sub-alternatives. For the Final EIR/EIS (FEIRS), new modeling was conducted for the No Action Alternative and the three RDEIR/SDEIS sub-alternatives at ELT with modeling assumptions matching the description of the alternatives, to confirm the reported RDEIR/SDEIS CEQA/NEPA determinations. Table 5F.1-1 includes a list of the surrogate models used in the RDEIR/SDEIS and the new models used in the FEIRS. Individual resource chapters in the FEIRS include the results from the new modeling for the No Action Alternative and the Alternatives 2D, 4A and 5A. This appendix includes comparisons of the surrogate modeling results used in the RDEIR/SDEIS to the new modeling results prepared for the FEIRS to evaluate if the incremental changes between the Alternative and the No Action Alternative remain consistent with the RDEIR/SDEIS. It also includes a summary of the key differences in the assumptions used for surrogate modeling and the new modeling, and provides a narrative summary of the key findings for each RDEIR/SDEIS sub-alternatives based on the two versions of CALSIM II modeling results.

Table 5F.1-1. Summary of the Models Used for the RDEIR/SDEIS and the FEIRS

	RDEIR/SDEIS Surrogate Models	Final EIR/EIS Models
No Action Alternative	2010 DEIRS No Action Alternative at ELT	2010 DEIRS No Action Alternative at ELT with Fremont Weir updates noted in Table 5F.2-1
Alternative 2D	2010 DEIRS Alternative 2A at ELT	2010 DEIRS Alternative 2A at ELT updated for Alternative 2D assumptions noted in Table 5F.3-1
Alternative 4A	Modeled as a range between 2010 DEIRS Alternative 4 H3 and H4 at ELT	2010 DEIRS Alternative 4 H3 at ELT updated for Alternative 4A assumptions noted in Table 5F.4-1
Alternative 5A	2010 DEIRS Alternative 5 at ELT	2010 DEIRS Alternative 5 at ELT updated for Alternative 5A assumptions noted in Table 5F.5-1

5F.2 No Action Alternative

As noted above, a new No Action Alternative at ELT was simulated for the FEIRS. CALSIM II modeling assumptions for the FEIRS No Action Alternative at ELT were consistent with the DEIRS No Action Alternative, except for the Fremont Weir modification to represent the NMFS BO (June, 2009) Action I.6.1: Restoration of Floodplain Rearing Habitat. Fremont Weir was assumed to be modified as described in Table 5F.2-1. These assumptions are only for use in the FEIRS modeling as a placeholder, while the proposed changes associated with this RPA are still in development under a separate multi-agency process.

The assumed changes in the Fremont Weir configuration and operations under the FEIRS No Action Alternative at ELT CALSIM II modeling were consistent with the DEIRS Alternative 1A Conservation Measure 2 (CM2) assumptions[1].

Simulated CVP-SWP operations resulted under the FEIRS No Action Alternative at ELT CALSIM II negligible changes compared to the DEIRS No Action Alternative at ELT used for the RDEIR/SDEIS impact analyses as shown in Figures 5F.3-1 to 5F.3-40, with a couple of exceptions. As shown in Figure 5F.3-20, the resulting Yolo Bypass flows at the Delta are higher under the FEIRS No Action Alternative at ELT during winter and spring months compared to the DEIRS No Action Alternative at ELT, and the resulting Sacramento River flow at Freeport (Figure 5F.3-19) are corresponding lower, as a result of the assumed Fremont Weir modifications.

[1] When the existing Fremont Weir is spilling, the notch is assumed to be open under the FEIRS No Action Alternative at ELT, unlike the Alternative 4A Action Alternative, which assumes it's closed. This is just a difference in modeling assumption, and there is no intent for differences in the future Fremont Weir modifications and operations between the FEIRS No Action Alternative and Alternative 4A. The effect of this difference in assumption is minor and limited to winter months of wet and above normal years at high flow conditions. This has no effect on the impact analysis and significance conclusions in any of the resource chapters in this EIR/S.

Table 5F.2-1. Differences in the Assumed Fremont Weir Configurations and Operations Criteria between the DEIRS No Action Alternative at ELT and the FEIRS No Action Alternative at ELT

	RDEIR/SDEIS No Action Alternative at ELT	FEIRS No Action Alternative at ELT
Weir Improvements	None. Weir configurations assumed to be consistent with current conditions.	Fremont Weir – Improve fish passage at existing weir elevation; construct opening and operable gates at elevation 17.5 ft with fish passage facilities; construct opening and operable gates at a smaller opening with fish passage enhancement at elevation 11.5 ft.
Fremont Weir operations modification	Weir operations assumed to be consistent with current conditions.	To provide seasonal floodplain inundation in the Yolo Bypass, the 17.5 ft and the 11.5 ft elevation gates are assumed to be opened between December 1st and March 31st. This may extend to May 15th, depending on the hydrologic conditions and the measures to minimize land use and ecological conflicts in the bypass. As a simplification for modeling, the gates are assumed opened until April 30th in all years. The gates are operated to limit maximum spill to 6,000 cfs until the Sacramento River stage reaches the existing Fremont Weir elevation. While desired inundation period is on the order of 30 to 45 days, gates are not managed to limit to this range, instead the duration of the event is governed by the Sacramento River flow conditions. To provide greater opportunity for the fish in the bypass to migrate upstream into the Sacramento River, the 11.5 ft elevation gate is assumed to be open for an extended period between September 15th and June 30th. As a simplification for modeling, the period of operation for this gate is assumed to be September 1st to June 30th. The spills through the 11.5 ft elevation gate are limited to 100 cfs to support fish passage. The operation of the gate is assumed to be only based on the flow at Fremont Weir.

5F.3 Alternative 2D

As noted above, results from the 2010 DEIRS Alternative 2A CALSIM II modeling simulation were used in the RDEIR/SDEIS as a surrogate for the Alternative 2D impact evaluation. For the FEIRS, a new CALSIM II model was simulated to represent Alternative 2D at ELT with appropriate operational assumptions. The differences in the CALSIM II modeling assumptions are summarized in Table 5F.3-1. A full description of the CALSIM II modeling, and the assumptions used for Alternative 2D are included in the Appendix 5A *Modeling Technical Appendix* of the FEIRS.

Table 5F.3-1. Differences between Alternative 2A and Alternative 2D that Potentially Affect the CVP-SWP Operations

	RDEIR/SDEIS Alternative 2A at ELT	FEIRS Alternative 2D at ELT	CALSIM II Assumption
Fremont Weir modification, and operations	Included as part of CM2	Not specifically part of the Alternative; considered as part of the No Action Alternative	Included; assumptions consistent with the Alternative 1A.
Tidal habitat restoration	Included as part of CM4 (25000 acres at ELT and 65000 acres at LLT)	Only the restoration required as part of any mitigation requirements beyond the 8000 acres required under FWS (2008) BiOp	Not included; 8000 acres required under FWS BiOp not modeled explicitly in the No Action Alternative or the Alternative.
Shift of D-1641 Emmaton water quality compliance location to Threemile Slough	Included as part of Alternative 2A in the DEIRS	Not included	Not included; Modeled water quality compliance with D-1641 Emmaton requirement consistent with the FEIRS No Action Alternative at ELT.

Alternative 2A at ELT CALSIM II model from the DEIRS was modified to include following specific changes to represent Alternative 2D at ELT for the FEIRS:

- Artificial Neural Network (ANN) used in CALSIM II to simulate flow – salinity relationship in the Delta under DEIRS Alternative 2A ELT was modified to be consistent with the FEIRS No Action Alternative at ELT, which does not include any effects associated with tidal habitat restoration in the Delta.
- Assumed D-1641 agricultural salinity compliance location on the Sacramento River at Threemile Slough was reverted back to Emmaton location consistent with the FEIRS No Action Alternative at ELT.
- Updated WSI-DI curves used to determine the water supply allocations in the CALSIM II model.

All the remaining CALSIM II assumptions for Alternative 2D remained consistent with Alternative 2A including the assumptions related to the water supply allocation and reservoir balancing.

Figures 5F.3-1 to 5F.3-40 include the CALSIM II results for RDEIR/SDEIS No Action Alternative at ELT, RDEIR/SDEIS Alternative 2A at ELT, FEIRS No Action Alternative at ELT and FEIRS Alternative 2D at ELT. These figures show the similarities and differences between the surrogate models used for the RDEIR/SDEIS and the final models used for the FEIRS, and also allow assessment of how the incremental changes between the Alternative and the No Action Alternative would differ between RDEIR/SDEIS and FEIRS.

Several CVP-SWP results including Trinity, Shasta, Folsom, Oroville and San Luis storage conditions, flows in Trinity River, Sacramento River, Feather River, American River and Delta at key locations, and CVP-SWP exports and deliveries, are presented in Figures 5F.3-1 to 5F.3-40.

As noted earlier the No Action Alternative results are nearly identical between the RDEIRS/SDEIS and FEIRS versions. Given the updates in Delta flow-salinity relationships and compliance with

Emmaton water quality standard, the Delta operations may differ slightly and correspondingly upstream operations also may change under the FEIRS Alternative 2D at ELT compared to the RDEIRS/SDEIS results.

Trinity, Shasta and Oroville end of May and end of September storage conditions remained similar under the two No Action Alternative at ELT versions, as well as under FEIRS Alternative 2D at ELT compared to the RDEIR/SDEIS. Folsom end of May storage conditions are similar and end of September storage conditions show slightly higher storage levels under the FEIRS Alternative 2D at ELT compared to the RDEIR/SDEIS results. Both, CVP and SWP portions of the San Luis Reservoir exhibit slightly higher storage conditions under FEIRS Alternative 2D at ELT compared to RDEIR/SDEIS.

Trinity River flows downstream of Lewiston are identical under the two No Action Alternative versions, Alternative 2A and Alternative 2D at ELT. Sacramento River flows at Keswick and Wilkins Slough locations under the FEIRS No Action Alternative at ELT and Alternative 2D at ELT remain similar to the respective RDEIR/SDEIS results, under all water year types. Feather River flows in the low flow channel remain unchanged. Feather River flows below Thermalito under FEIRS Alternative 2D at ELT remain mostly similar compared to the RDEIR/SDEIS, except for minor increases in the spring months under above normal and below normal water year types, and slight reductions in the winter along with a slight increase in summer months under critical year average flows. American River flow below Nimbus remain similar under all water year types, except in critical years, where the average flows under the FEIRS Alternative 2D at ELT are slightly lower than RDEIR/SDEIS flows during July and October months and slightly higher in May. The critical year changes correspond to the minor changes in the Delta Exports patterns as shown in Figure 5F.3-24.

Sacramento River at Freeport flow under the FEIRS Alternative 2D at ELT remained similar to RDEIR/SDEIS in all water year types. As noted earlier, Sacramento River flow at Freeport under the FEIRS No Action Alternative version is lower than the RDEIR/SDEIS version during the winter and spring months, due to the Fremont Weir changes. Similarly, Yolo Bypass flows remain similar under the FEIRS Alternative 2D compared to the RDEIR/SDEIS, however, the FEIRS No Action Alternative results in higher flows compared to the RDEIR/SDEIS due to the Fremont Weir changes. San Joaquin River flow at Vernalis remains unchanged. Delta outflows are nearly identical, as well. Old and Middle River flows under Alternative 2D at ELT generally remain similar to the RDEIR/SDEIS, except for small reduction in January and a small increase in other winter months. These shifts in Old and Middle River flows correspond to the shifts in the south Delta exports in January and summer months in the critical years, which may be a result of the changes in the Delta flow salinity relationships between the Alternative 2A at ELT, which included 25000 ac of tidal habitat restoration and Alternative 2D at ELT without any tidal habitat restoration.

Annual deliveries to the CVP north of Delta agricultural and M&I service contractor deliveries differ slightly, however, the deliveries under the FEIRS Alternative 2D remain similar to the No Action Alternative in all water year types, consistent with the RDEIR/SDEIS.

Annual Delta exports show minor changes between the RDEIR/SDEIS and the FEIRS, however the exports increase under the FEIRS Alternative 2D at ELT compared to the No Action Alternative at ELT consistent with the RDEIR/SDEIS result. The proportion of the Delta exports at the north Delta diversion intakes under the FEIRS Alternative 2D at ELT remains similar to the RDEIR/SDEIS.

Total SWP deliveries, CVP south of Delta agricultural and M&I service contractors deliveries under FEIRS Alternative 2D at ELT differ slightly compared to the RDEIR/SDEIS Alternative 2A at ELT,

however, both models show relatively similar incremental increases in the deliveries compared to their respective No Action Alternative at ELT.

Overall, CVP-SWP operations results under the FEIRS Alternative 2D at ELT remained similar to the RDEIR/SDEIS results, and the incremental changes compared to their respective No Action Alternatives remained similar. Minor changes in the Alternative 2D results are primarily driven by the changes associated with the CVP-SWP operational response to the Emmaton compliance and the salinity management in the Delta without the tidal marsh restoration.

5F.4 Alternative 4A

As noted above, results from the 2010 DEIRS Alternative 4 H3 and H4 at ELT CALSIM II modeling simulation were used in the RDEIR/SDEIS as a surrogate to bookend the Alternative 4A impact evaluation. For the FEIRS, a new CALSIM II model was simulated to represent Alternative 4A at ELT with appropriate operational assumptions that are consistent with California Water Fix Section 7 Biological Assessment Proposed Action scenario (USBR and DWR, 2016). The differences in the major CALSIM II modeling assumptions are summarized in Table 5F.4-1. A full description of the CALSIM II modeling, and the assumptions used for Alternative 4A are included in the Appendix 5A *Modeling Technical Appendix* of the FEIRS.

Table 5F.4-1. Differences between Alternative 4 H3 and H4, and Alternative 4A that Potentially Affect the CVP-SWP Operations

	RDEIR/SDEIS Alternative 4 H3 and H4 at ELT	FEIRS Alternative 4A at ELT	CALSIM II Assumption
Fremont Weir modification, and operations	Included as part of CM2	Not specifically part of the Alternative; considered as part of the No Action Alternative	Included; assumptions consistent with the Alternative 1A.
Tidal habitat restoration	Included as part of CM4 (25000 acres at ELT and 65000 acres at LLT)	Only the restoration required as part of any mitigation requirements beyond the 8000 acres required under FWS (2008) BiOp	Not included; 8000 acres required under FWS BiOp not modeled explicitly in the No Action Alternative or the Alternative.
Shift of D-1641 Emmaton water quality compliance location to Threemile Slough	Included as part of Alternative 4 H3 and H4 in the DEIRS	Not included	Not included; Modeled water quality compliance with D-1641 Emmaton requirement consistent with the FEIRS No Action Alternative at ELT.
Spring Delta Outflow beyond D-1641 requirements	Included as part of Alternative 4 decision tree scenario H4	Required to meet Mar – May average Delta outflow resulting under the No Action Alternative at ELT	Modeled by constraining the total Delta exports by the San Joaquin River i:e ratio requirement under 2009 NMFS BiOp Action IV.2.1, during April and May.

Alternative 4 H3 at ELT CALSIM II model from the DEIRS was modified to include the following specific changes to represent Alternative 4A at ELT for the FEIRS:

- ANN used in CALSIM II to simulate flow – salinity relationship in the Delta under DEIRS Alternative 4 H3 ELT was modified to be consistent with the FEIRS No Action Alternative at ELT, which does not include any effects associated with tidal habitat restoration in the Delta.
- Assumed D-1641 agricultural salinity compliance location on the Sacramento River at Threemile Slough was reverted back to Emmaton location consistent with the FEIRS No Action Alternative at ELT.
- Constrained the total Delta exports (i.e., pumping at both north and south Delta intakes) by the 2009 NMFS BiOp Action IV.2.1 San Joaquin River i:e ratio consistent with the No Action Alternative at ELT, to achieve Mar – May average spring Delta outflow under the No Action Alternative at ELT.
- Updated north Delta Diversion operation constraints to better reflect the proposed north Delta diversion bypass flow criteria.
- Added an additional constraint for the north Delta diversion to account for fish screen sweeping velocity constraints.
- Added an explicit constraint to maintain south Delta pumping of up to 3,000 cfs during Jul – Sep months.
- San Luis reservoir operations modified to minimize south-of-Delta shortages during fall months.
- Updated WSI-DI curves used to determine the water supply allocations in the CALSIM II model.

All the remaining CALSIM II assumptions for Alternative 4A remained consistent with Alternative 4 H3.

Figures 5F.4-1 to 5F.4-40 include the CALSIM II results for RDEIR/SDEIS No Action Alternative at ELT, RDEIR/SDEIS Alternative 4 H3 and H4 scenarios at ELT, FEIRS No Action Alternative at ELT and FEIRS Alternative 4A at ELT. These figures show the similarities and differences between the surrogate models used for the RDEIR/SDEIS and the final models used for the FEIRS, and also allow assessment of how the incremental changes between the Alternative and the No Action Alternative would differ between RDEIR/SDEIS and FEIRS.

Several CVP-SWP results including Trinity, Shasta, Folsom, Oroville and San Luis storage conditions, flows in Trinity River, Sacramento River, Feather River, American River and Delta at key locations, and CVP-SWP exports and deliveries, are presented in Figures 5F.4-1 to 5F.4-40.

As noted earlier the No Action Alternative results are nearly identical between the DEIRS and FEIRS versions. Even though the FEIRS Alternative 4A included several differences in assumptions, the CVP-SWP results are within the range of results presented in the RDEIR/SDEIS Alternative 4 H3 and H4 scenarios.

Trinity, Shasta, Folsom and Oroville end of May and end of September storage conditions remained similar under the two No Action Alternative at ELT versions, as well as under FEIRS Alternative 4A at ELT and RDEIR/SDEIS Alternative 4 H3 at ELT. CVP share of the San Luis Reservoir storage under FEIRS Alternative 4A is generally within the range simulated under the RDEIR/SDEIS Alternative 4 H3 and H4 scenarios. SWP share of the San Luis Reservoir exhibit higher storage conditions under

FEIRS Alternative 4A at ELT compared to the storage range in RDEIR/SDEIS given the modifications to the San Luis operations as noted above.

Trinity River flows downstream of Lewiston are identical under the two No Action Alternative and Alternative 4A at ELT under the FEIRS consistent with RDEIR/SDEIS. Sacramento River flows at Keswick and Wilkins Slough locations under the FEIRS No Action Alternative at ELT and Alternative 4A at ELT remain similar compared to the respective RDEIR/SDEIS results, under all water year types. Feather River flows in the low flow channel remain unchanged. Feather River flows below Thermalito under FEIRS Alternative 4A at ELT remain within the range of flows under the Alternative 4 H3 and H4 at ELT, except for minor increases in July under below normal water year types, and slight reductions in the December of above normal year average flows. American River flow below Nimbus remain within the reported range of flows under the RDEIR/SDEIS Alternative 4 H3 and H4 scenarios in all water year types, except in below normal and critical year types. In the below normal years, the average flows in June under the FEIRS Alternative 4A at ELT are slightly higher than RDEIR/SDEIS, and slightly lower in July. In the critical years, the average flows in April under the FEIRS Alternative 4A at ELT are slightly lower than RDEIR/SDEIS, and slightly higher in July.

Sacramento River at Freeport flow under the FEIRS Alternative 4A at ELT remained within the Alternative 4 H3 and H4 flow range reported in the RDEIR/SDEIS in all water year types. As noted earlier, Sacramento River flow at Freeport under the FEIRS version of the No Action Alternative at ELT is lower than the RDEIR/SDEIS version during the winter and spring months, due to the Fremont Weir changes. Similarly, Yolo Bypass flow remains similar FEIRS Alternative 4A compared to the RDEIR/SDEIS, however, the FEIRS No Action Alternative at ELT results in higher flows compared to the RDEIR/SDEIS due to the Fremont Weir changes. San Joaquin River flow at Vernalis remains unchanged. FEIRS Alternative 4A at ELT Delta outflows are within the range exhibited under RDEIR/SDEIS Alternative 4 H3 and H4 scenarios. Old and Middle River flows under FEIRS Alternative 4A during the fall, winter and spring month remain within the range of flows resulting under the RDEIR/SDEIS Alternative 4 H3 and H4 scenarios, and show small shifts in the summer months.

Annual deliveries to the CVP north of Delta agricultural and M&I service contractor deliveries differ slightly, however, the deliveries under the FEIRS Alternative 4A remain similar to the No Action Alternative in all water year types, consistent with the RDEIR/SDEIS.

Annual Delta exports under the FEIRS Alternative 4A at ELT are higher than the No Action Alternative, and are within the range of exports under the Alternative 4 H3 and H4 scenarios reported under the RDEIR/SDEIS. The proportion of the Delta exports at the north Delta diversion intake under the FEIRS Alternative 4A at ELT generally remains within the Alternative 4 H3 and H4 range under the RDEIR/SDEIS, except in the wet years where diversions at the north Delta intakes under FEIRS Alternative 4A at ELT are lower than the RDEIR/SDEIS.

Total SWP deliveries under FEIRS Alternative 4A at ELT are generally within the range of deliveries under RDEIRS/SDEIS Alternative 4 H3 and H4 scenarios, except in the drier year the SWP deliveries under FEIRS Alternative 4A at ELT are slightly higher than the range in the RDEIR/SDEIS. CVP south of Delta agricultural and M&I service contractors deliveries under the FEIRS Alternative 4A at ELT are generally lower than the RDEIR/SDEIS, as a result of using San Joaquin River i:e ratio to constrain Delta exports during April and May to meet the spring Delta outflow requirement.

Overall, CVP-SWP operations results under the FEIRS Alternative 4A at ELT remained similar to the RDEIR/SDEIS results, and the incremental changes compared to their respective No Action Alternatives remained similar, with one exception. CVP south of Delta agricultural and M&I service contractor deliveries are lower under FEIRS Alternative 4A at ELT compared to the range reported under the RDEIR/SDEIS. The changes in the Alternative 4A results are primarily driven by April – May export restrictions, however, also by the combined effect of the other operational changes reported above.

5F.5 Alternative 5A

As noted above, results from the 2010 DEIRS Alternative 5 CALSIM II modeling simulation were used in the RDEIR/SDEIS as a surrogate for the Alternative 5A impact evaluation. For the FEIRS, a new CALSIM II model was simulated to represent Alternative 5A at ELT with appropriate operational assumptions. The differences in the CALSIM II modeling assumptions are summarized in Table 5F.5-1. A full description of the CALSIM II modeling, and the assumptions used for Alternative 5A are included in the Appendix 5A *Modeling Technical Appendix* of the FEIRS.

Table 5F.5-1. Differences between Alternative 5 and Alternative 5A that Potentially Affect the CVP-SWP Operations

	RDEIR/SDEIS Alternative 5 at ELT	FEIRS Alternative 5A at ELT	CALSIM II Assumption
Fremont Weir modification, and operations	Included as part of CM2	Not specifically part of the Alternative; considered as part of the No Action Alternative	Included; assumptions consistent with the Alternative 1A.
Tidal habitat restoration	Included as part of CM4 (25000 acres at ELT and 65000 acres at LLT)	Only the restoration required as part of any mitigation requirements beyond the 8000 acres required under FWS (2008) BiOp	Not included; 8000 acres required under FWS BiOp not modeled explicitly in the No Action Alternative or the Alternative.
Shift of D-1641 Emmaton water quality compliance location to Threemile Slough	Included as part of Alternative 5 in the DEIRS	Not included	Not included; Modeled water quality compliance with D-1641 Emmaton requirement consistent with the FEIRS No Action Alternative at ELT.

Alternative 5 at ELT CALSIM II model from the DEIRS was modified to include following specific changes to represent Alternative 5A at ELT for the FEIRS:

- ANN used in CALSIM II to simulate flow – salinity relationship in the Delta under DEIRS Alternative 5 ELT was modified to be consistent with the FEIRS No Action Alternative at ELT, which does not include any effects associated with tidal habitat restoration in the Delta.
- Assumed D-1641 agricultural salinity compliance location on the Sacramento River at Threemile Slough was reverted back to Emmaton location consistent with the FEIRS No Action Alternative at ELT.

- Updated WSI-DI curves used to determine the water supply allocations in the CALSIM II model.

All the remaining CALSIM II assumptions for Alternative 5A remained consistent with Alternative 5 including the assumptions related to the water supply allocation and reservoir balancing.

Figures 5F.5-1 to 5F.5-40 include the CALSIM II results for RDEIR/SDEIS No Action Alternative at ELT, RDEIR/SDEIS Alternative 5 at ELT, FEIRS No Action Alternative at ELT and FEIRS Alternative 5A at ELT. These figures show the similarities and differences between the surrogate models used for the RDEIR/SDEIS and the final models used for the FEIRS, and also allow assessment of how the incremental changes between the Alternative and the No Action Alternative would differ between RDEIR/SDEIS and FEIRS.

Several CVP-SWP results including Trinity, Shasta, Folsom, Oroville and San Luis storage conditions, flows in Trinity River, Sacramento River, Feather River, American River and Delta at key locations, and CVP-SWP exports and deliveries, are presented in Figures 5F.5-1 to 5F.5-40.

As noted earlier the No Action Alternative results are nearly identical between the DEIRS and FEIRS versions. Given the updates in Delta flow-salinity relationships and the compliance with Emmaton water quality standard, the Delta operations may differ slightly and correspondingly upstream operations also may change under the FEIRS Alternative 5A at ELT compared to the RDEIRS/SDEIS results.

Trinity, Shasta and Oroville end of May and end of September storage conditions remained similar under the two No Action Alternative at ELT versions, as well as under FEIRS Alternative 5A at ELT and RDEIR/SDEIS version. Folsom end of May and end of September storage conditions show slightly higher levels under the FEIRS Alternative 5A at ELT compared to the RDEIR/SDEIS results. CVP share of the San Luis Reservoir storage is similar, but slightly higher under FEIRS Alternative 5A compared to the RDEIR/SDEIS. SWP share of the San Luis Reservoir exhibit slightly lower storage conditions under FEIRS Alternative 5A at ELT compared to RDEIR/SDEIS.

Trinity River flows downstream of Lewiston are identical under the two No Action Alternative versions, and RDEIR/SDEIS and FEIRS versions of Alternative 5A at ELT. Sacramento River flows at Keswick and Wilkins Slough locations under the FEIRS No Action Alternative at ELT and Alternative 5A at ELT remain similar compared to the respective RDEIR/SDEIS results, under all water year types. Feather River flows in the low flow channel remain unchanged. Feather River flows below Thermalito under FEIRS Alternative 5A at ELT remain mostly similar compared to the Alternative 5 at ELT, except for minor increases in the spring months under above normal and below normal water year types, and slight reductions in the winter along with a slight increase in summer months under dry and critical year average flows. American River flows below Nimbus remain similar under all water year types, except in critical years, where the average flows under the FEIRS Alternative 5A at ELT are slightly lower than RDEIR/SDEIS during May and October months, and slightly higher in June. The critical year changes likely correspond to the changes in the Delta salinity regime under the FEIRS Alternative 5A at ELT.

Sacramento River at Freeport flow under the FEIRS Alternative 5A at ELT remained similar to RDEIR/SDEIS in all water year types. As noted earlier, Sacramento River flow at Freeport under the FEIRS version of the No Action Alternative at ELT is lower than the RDEIR/SDEIS version during the winter and spring months, due to the Fremont Weir changes. Similarly, Yolo Bypass flow remains similar FEIRS Alternative 5A compared to the RDEIR/SDEIS, however, the FEIRS No Action Alternative results in higher flows compared to the RDEIR/SDEIS due to the Fremont Weir changes.

San Joaquin River flow at Vernalis remains unchanged. Delta outflows are nearly identical, as well. Old and Middle River flows under FEIRS Alternative 5A at ELT generally remain similar to the RDEIR/SDEIS, except for small reduction in October and a small increase in winter and summer months of critical year types. These shifts in Old and Middle River flows correspond to the shifts in the south Delta exports in the critical years, which may be a result of the changes in the Delta flow salinity relationships between the FEIRS Alternative 5A at ELT and the RDEIR/SDEIS.

Annual deliveries to the CVP north of Delta agricultural and M&I service contractor deliveries differ slightly, however, the deliveries under the FEIRS Alternative 5A remain similar to the No Action Alternative in all water year types, consistent with the RDEIR/SDEIS.

Annual Delta exports show minor changes between the RDEIR/SDEIS and the FEIRS, however the exports increase under the FEIRS Alternative 5A at ELT compared to the No Action Alternative at ELT consistent with the RDEIR/SDEIS result. The proportion of the Delta exports at the north Delta diversion intake under the FEIRS Alternative 5A at ELT remains similar to the RDEIR/SDEIS.

Total SWP deliveries, CVP south of Delta agricultural and M&I service contractors deliveries under the FEIRS Alternative 5A at ELT differ slightly compared to the RDEIR/SDEIS, however, both models show relatively similar incremental increases in the deliveries compared to the respective No Action Alternative at ELT.

Overall, CVP-SWP operations results under the FEIRS Alternative 5A at ELT remained similar to the RDEIR/SDEIS results, and the incremental changes compared to their respective No Action Alternatives remained similar. Minor changes in the Alternative 5A results are primarily driven by changes associated with the CVP-SWP operational response to the Emmaton compliance and the salinity management in the Delta without the tidal marsh restoration.

5F.6 References

USBR and DWR. 2016. Draft Biological Assessment for California Water Fix, January.

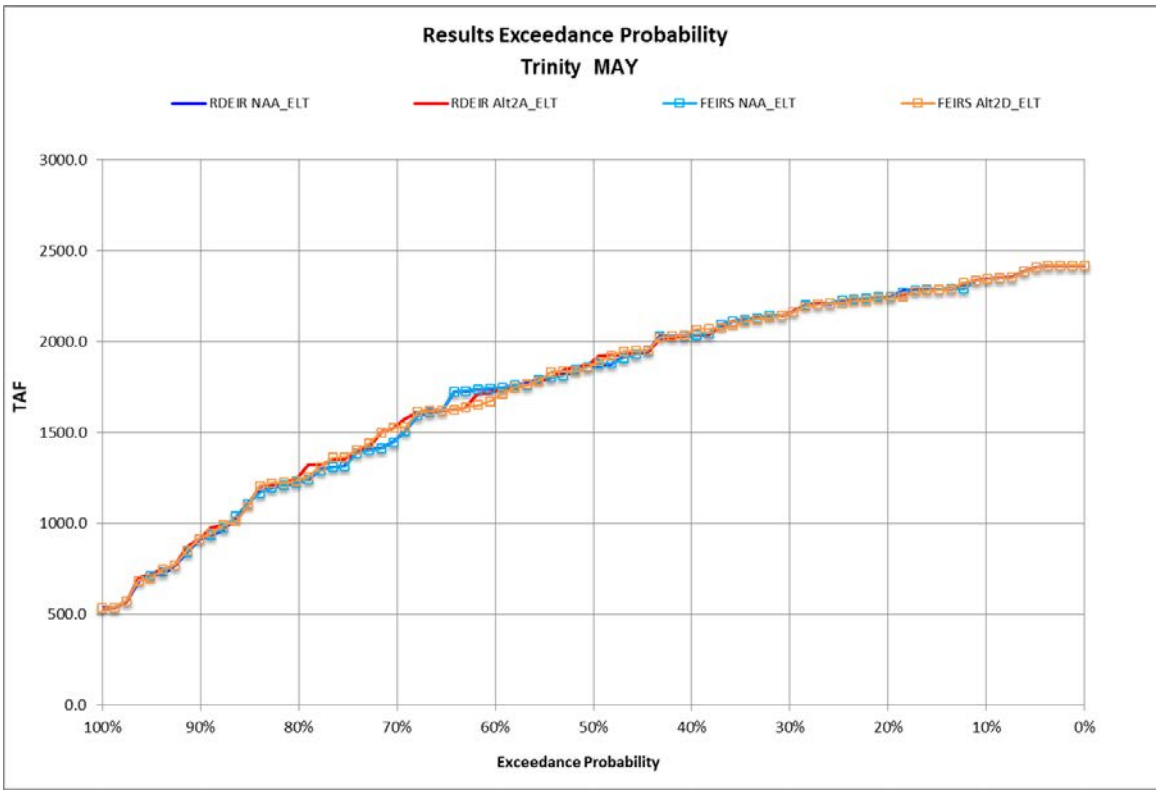

Figure 5F.3-1. Storage Exceedance Probability for Trinity Lake, End of May (Alt2D ELT)

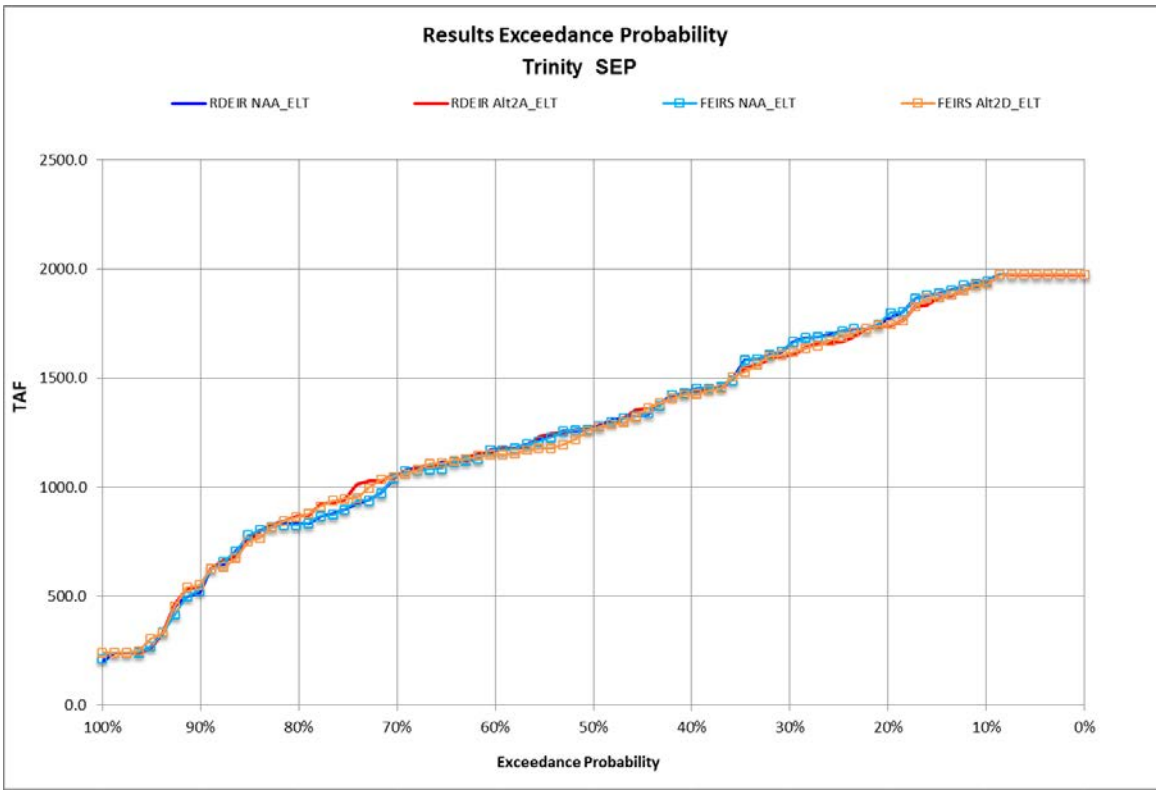

Figure 5F.3-2. Storage Exceedance Probability for Trinity Lake, End of September (Alt2D ELT)

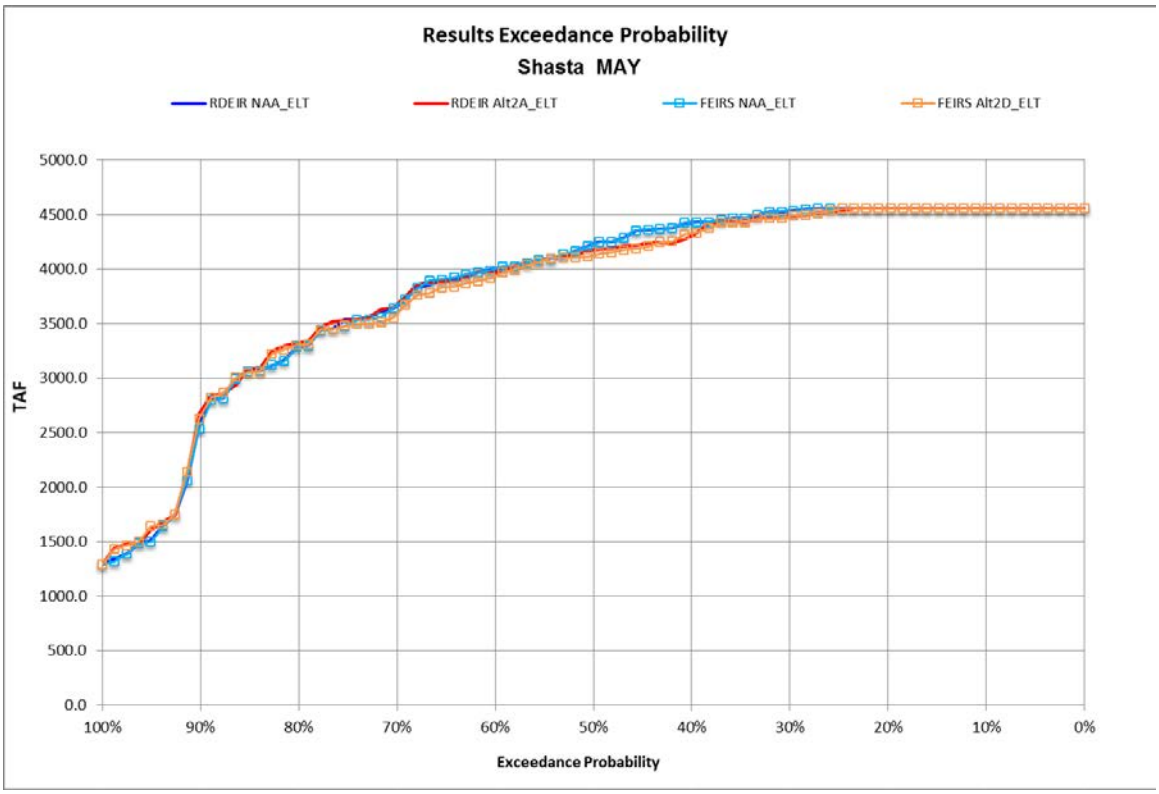

Figure 5F.3-3. Storage Exceedance Probability for Shasta Lake, End of May (Alt2D ELT)

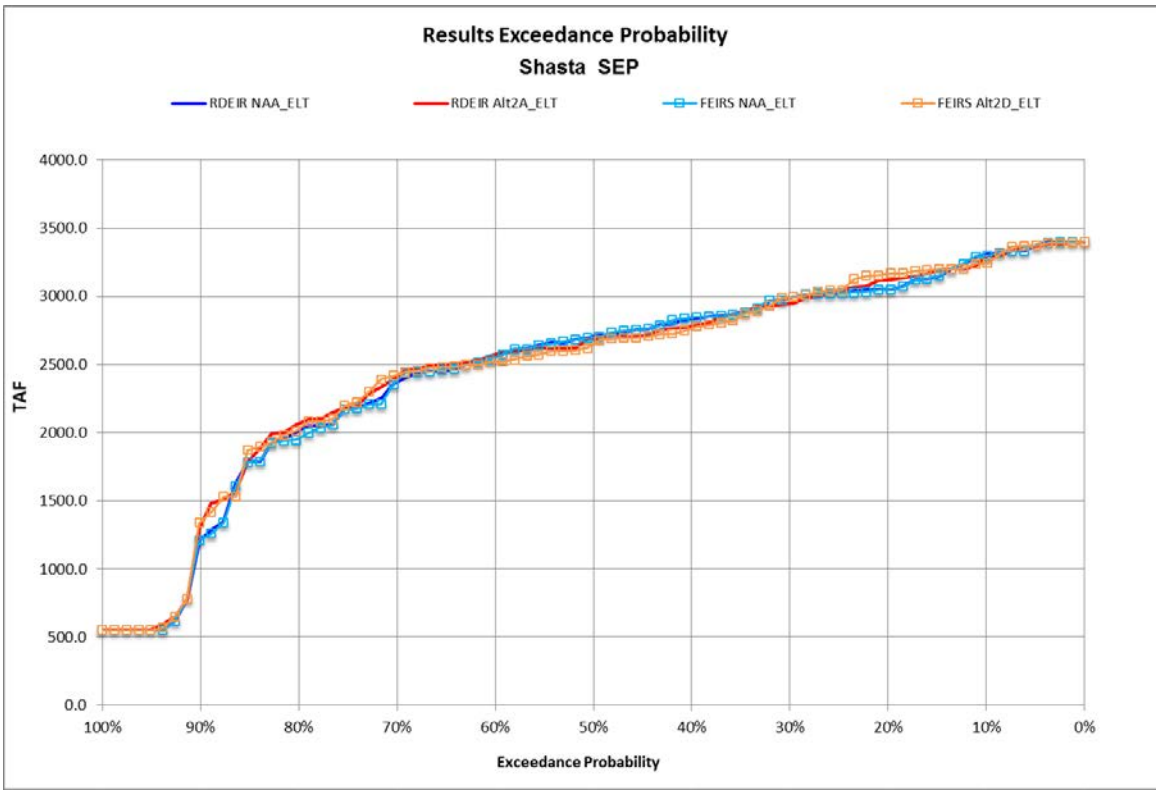

Figure 5F.3-4. Storage Exceedance Probability for Shasta Lake, End of September (Alt2D ELT)

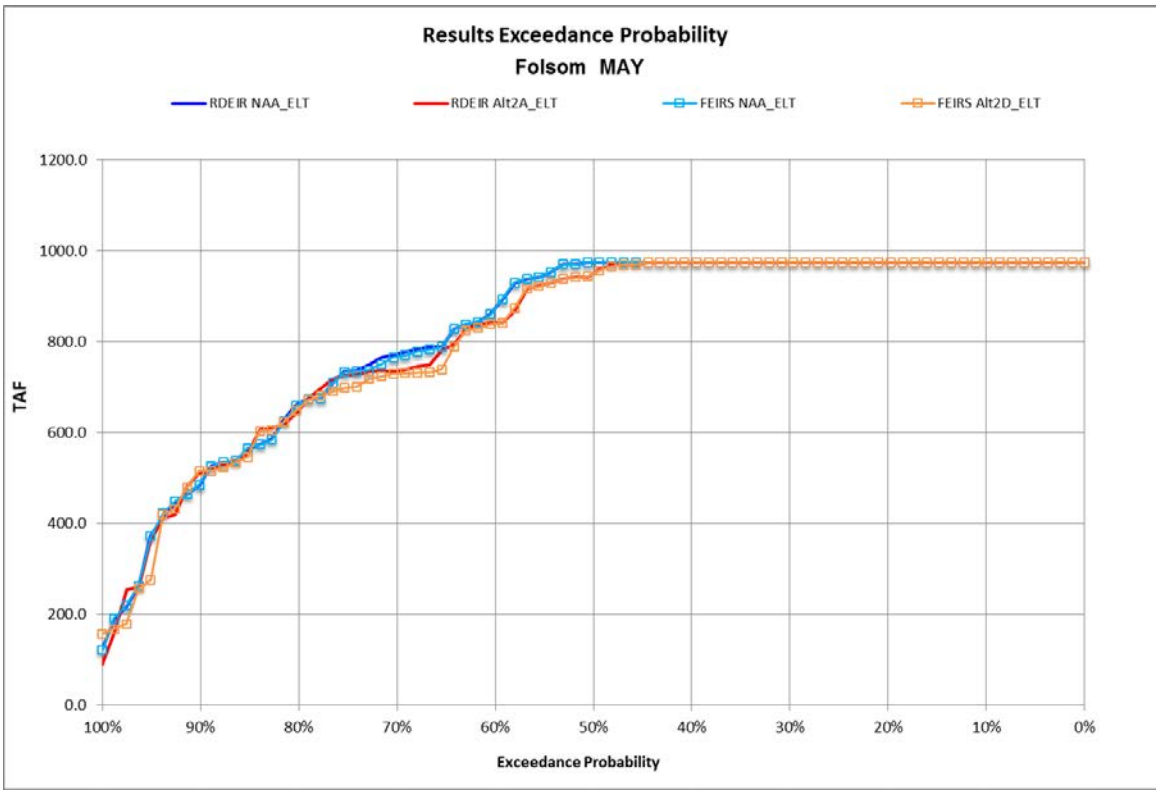

Figure 5F.3-5. Storage Exceedance Probability for Folsom Lake, End of May (Alt2D ELT)

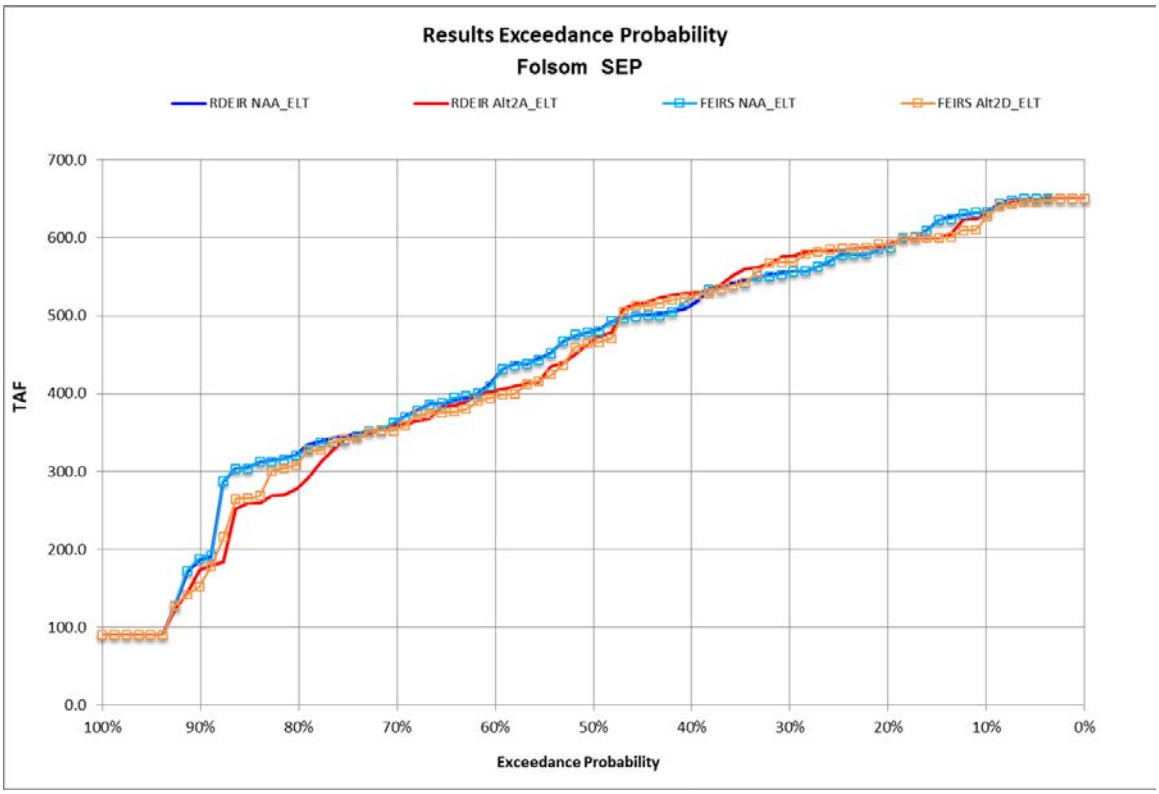

Figure 5F.3-6. Storage Exceedance Probability for Folsom Lake, End of September (Alt2D ELT)

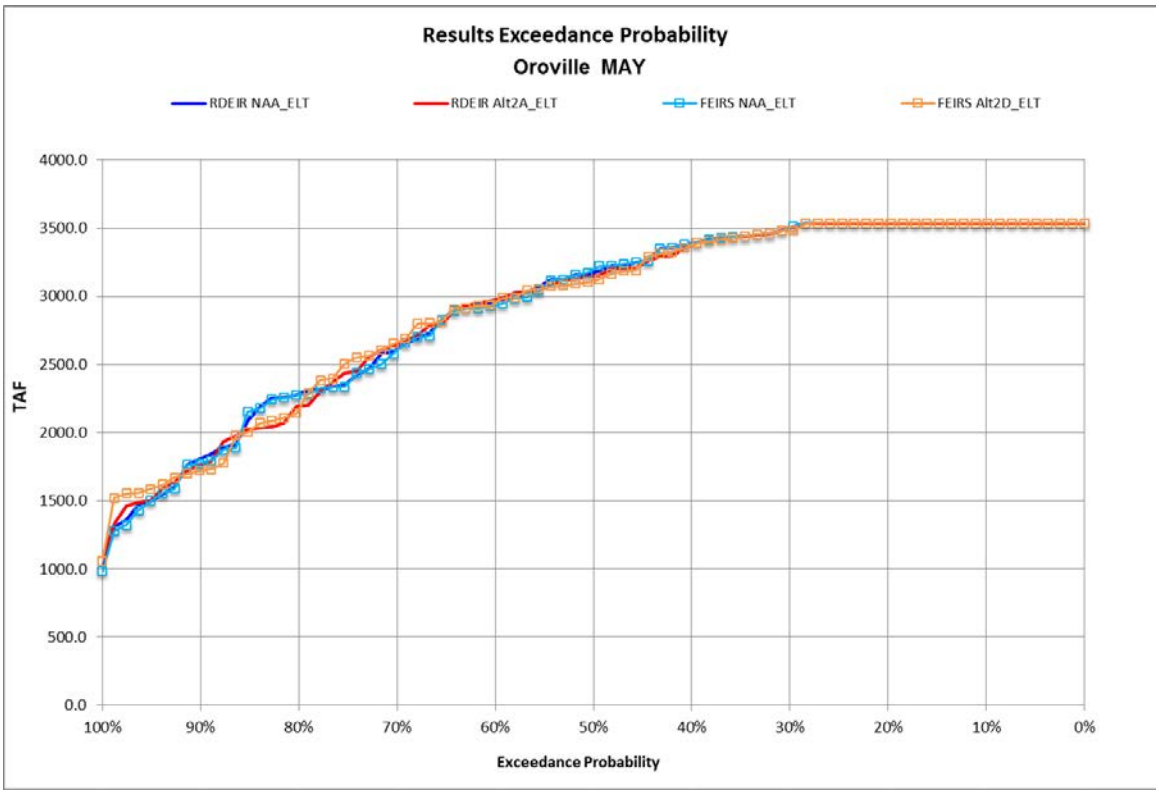

Figure 5F.3-7. Storage Exceedance Probability for Lake Oroville, End of May (Alt2D ELT)

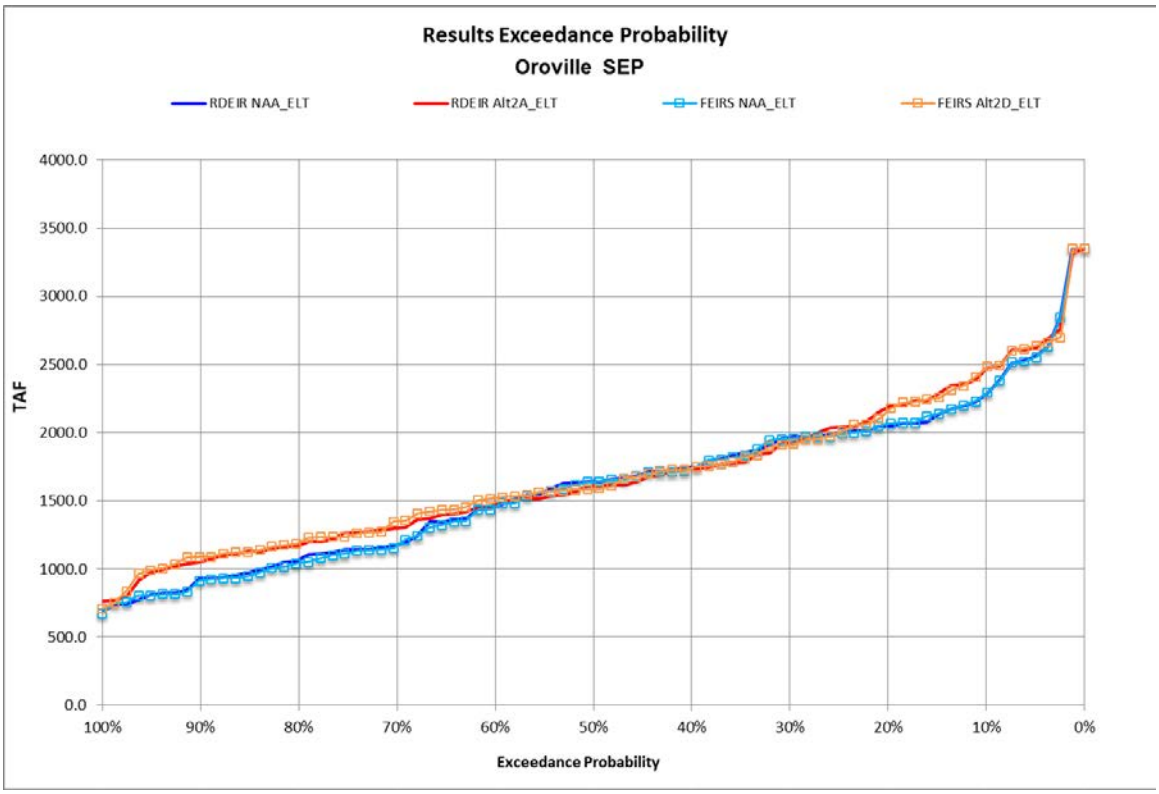

Figure 5F.3-8. Storage Exceedance Probability for Lake Oroville, End of September (Alt2D ELT)

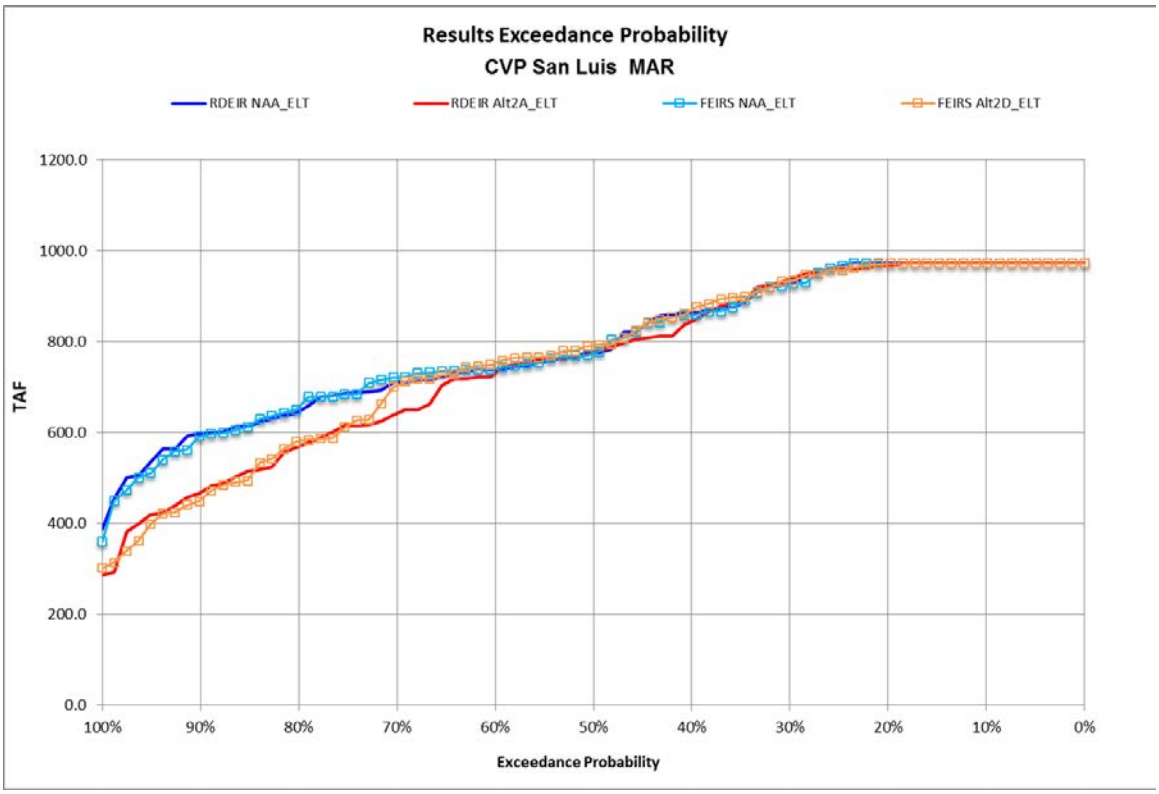

Figure 5F.3-9. Storage Exceedance Probability for CVP San Luis, End of March (Alt2D ELT)

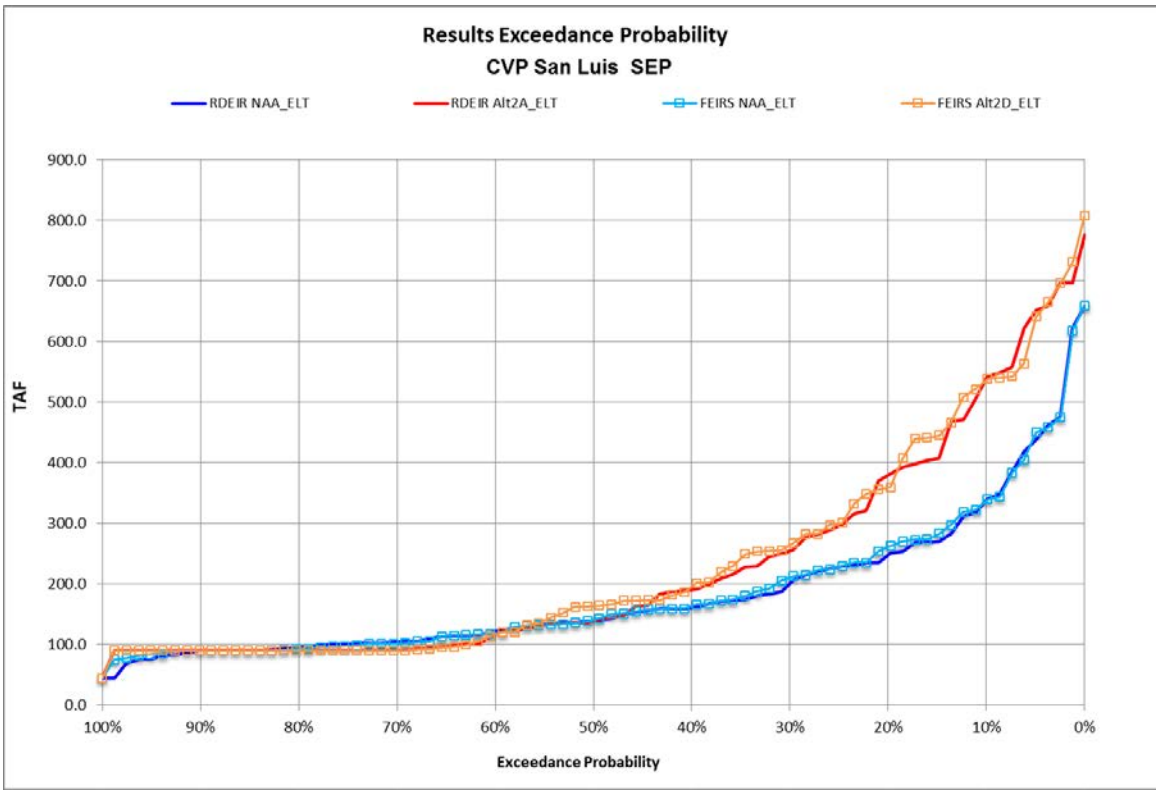

Figure 5F.3-10. Storage Exceedance Probability for CVP San Luis, End of September (Alt2D ELT)

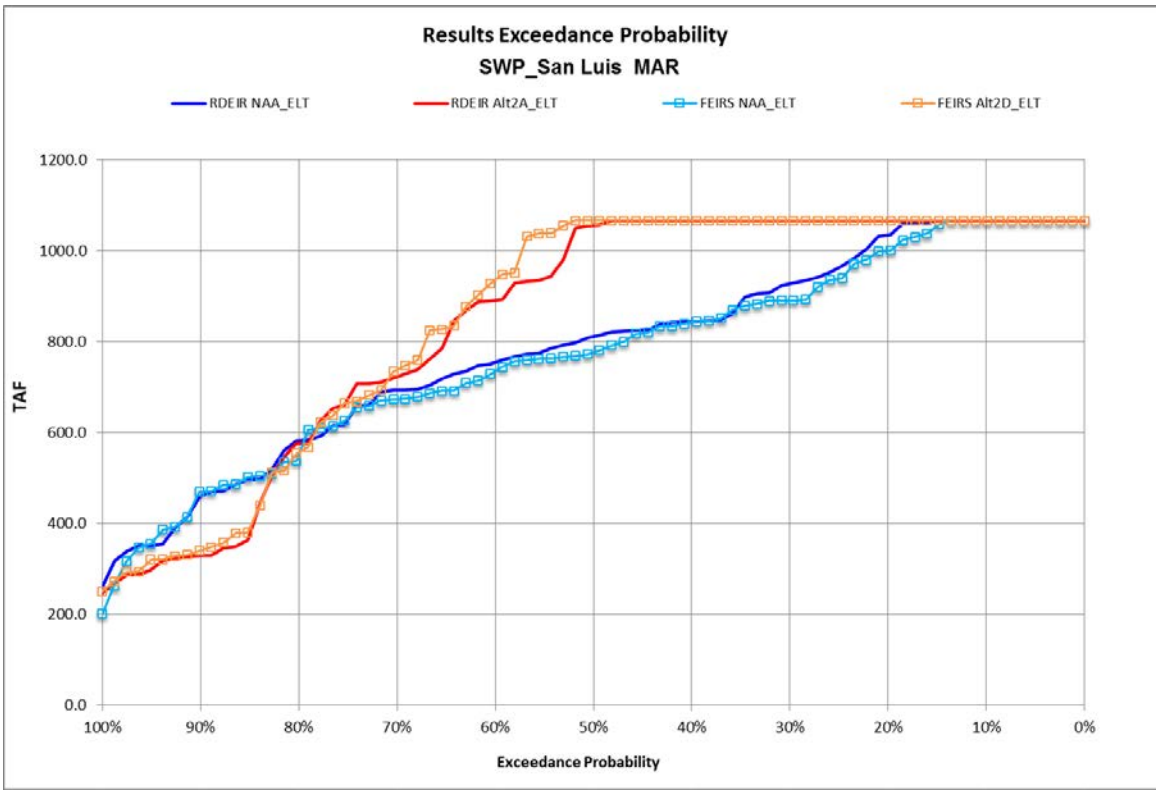

Figure 5F.3-11. Storage Exceedance Probability for SWP San Luis, End of March (Alt2D ELT)

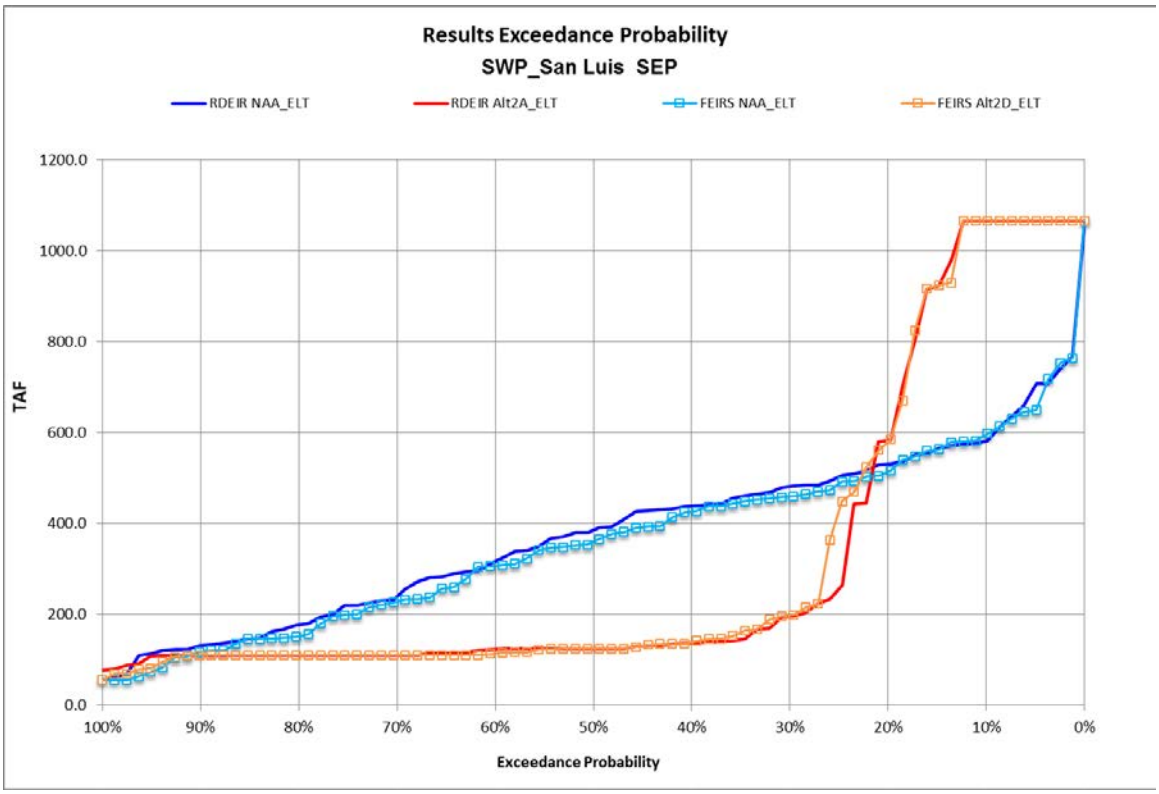

Figure 5F.3-12. Storage Exceedance Probability for SWP San Luis, End of September (Alt2D ELT)

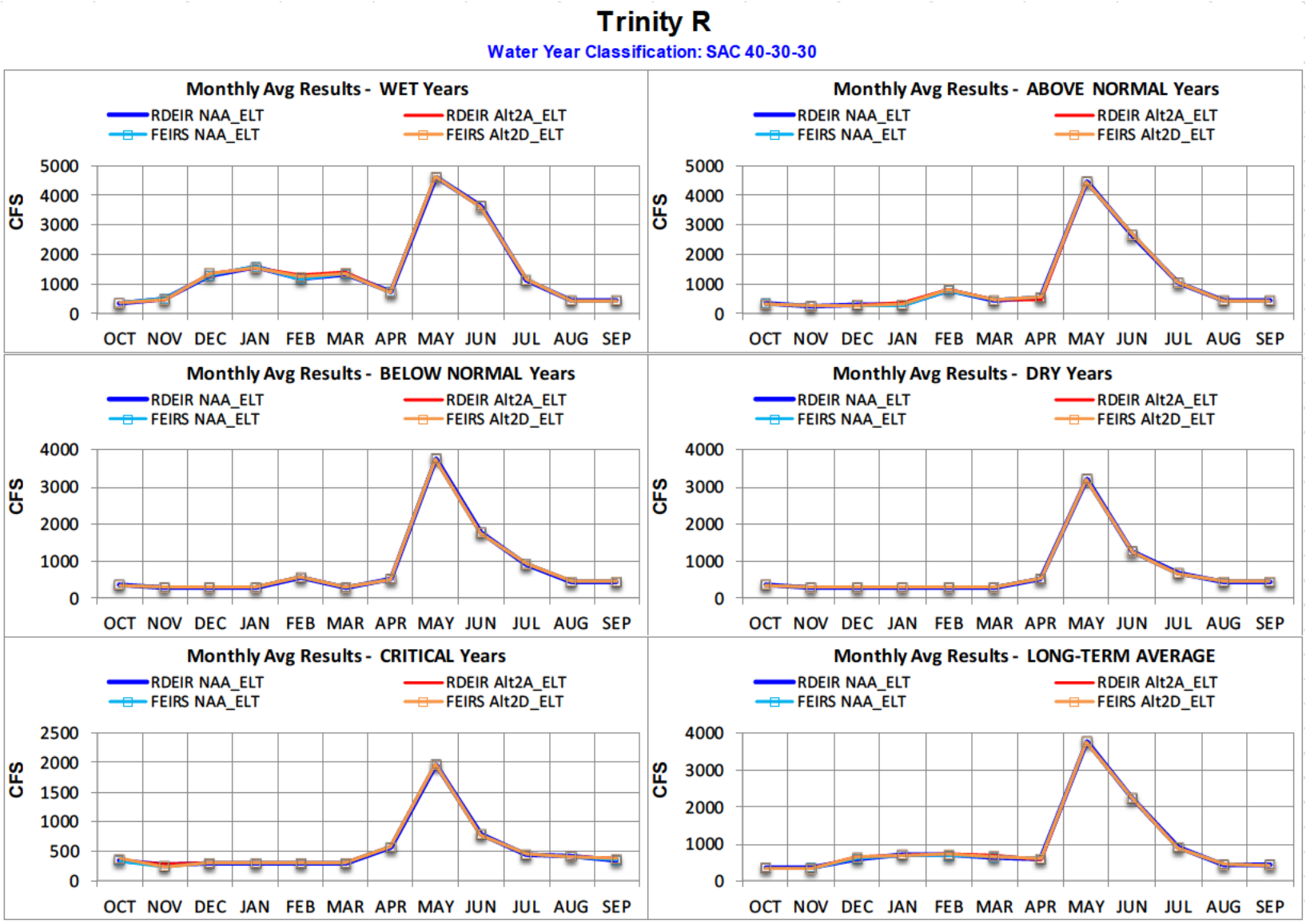

Figure 5F.3-13. Trinity River below Lewiston, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

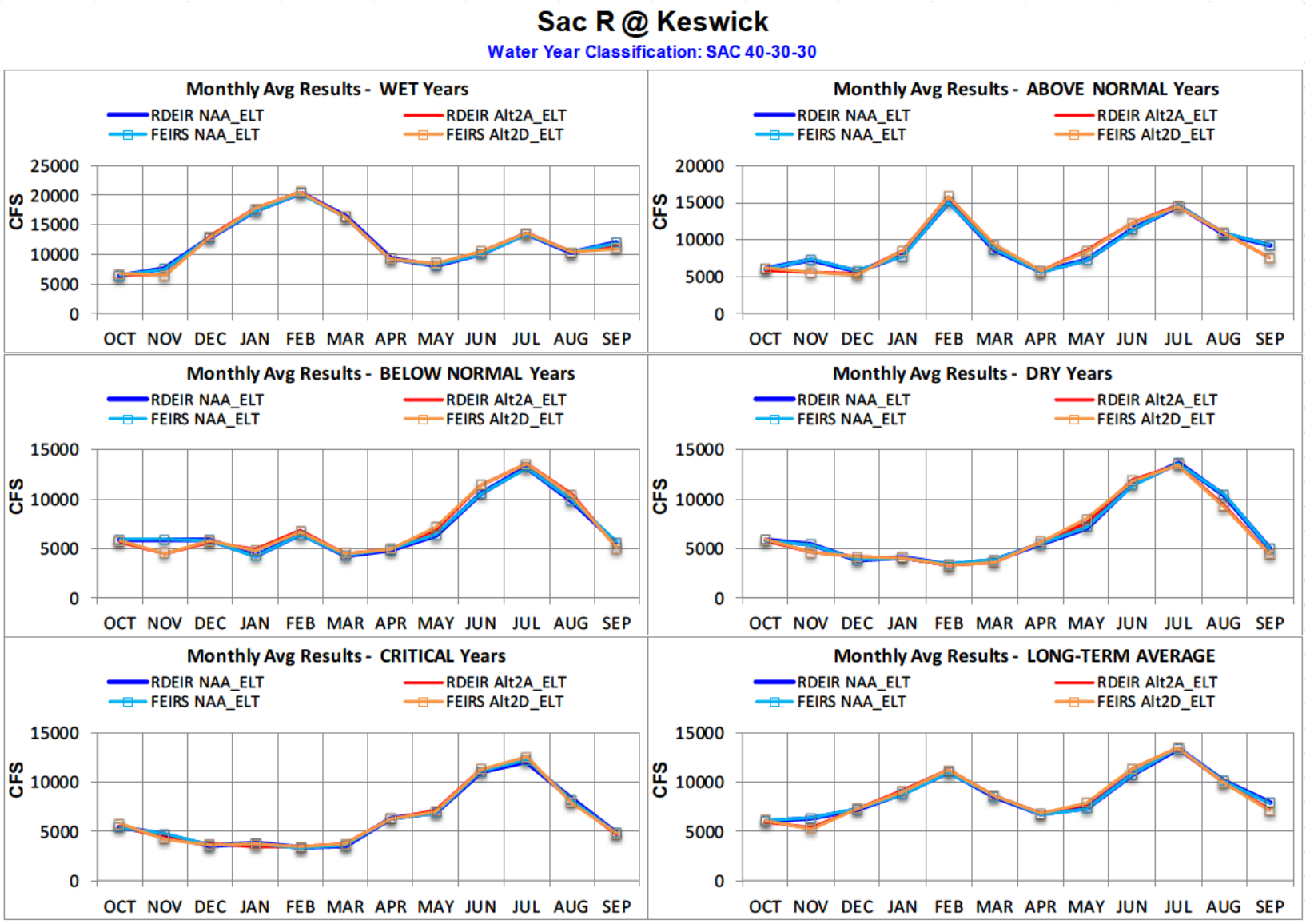

Figure 5F.3-14. Sacramento River below Keswick, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

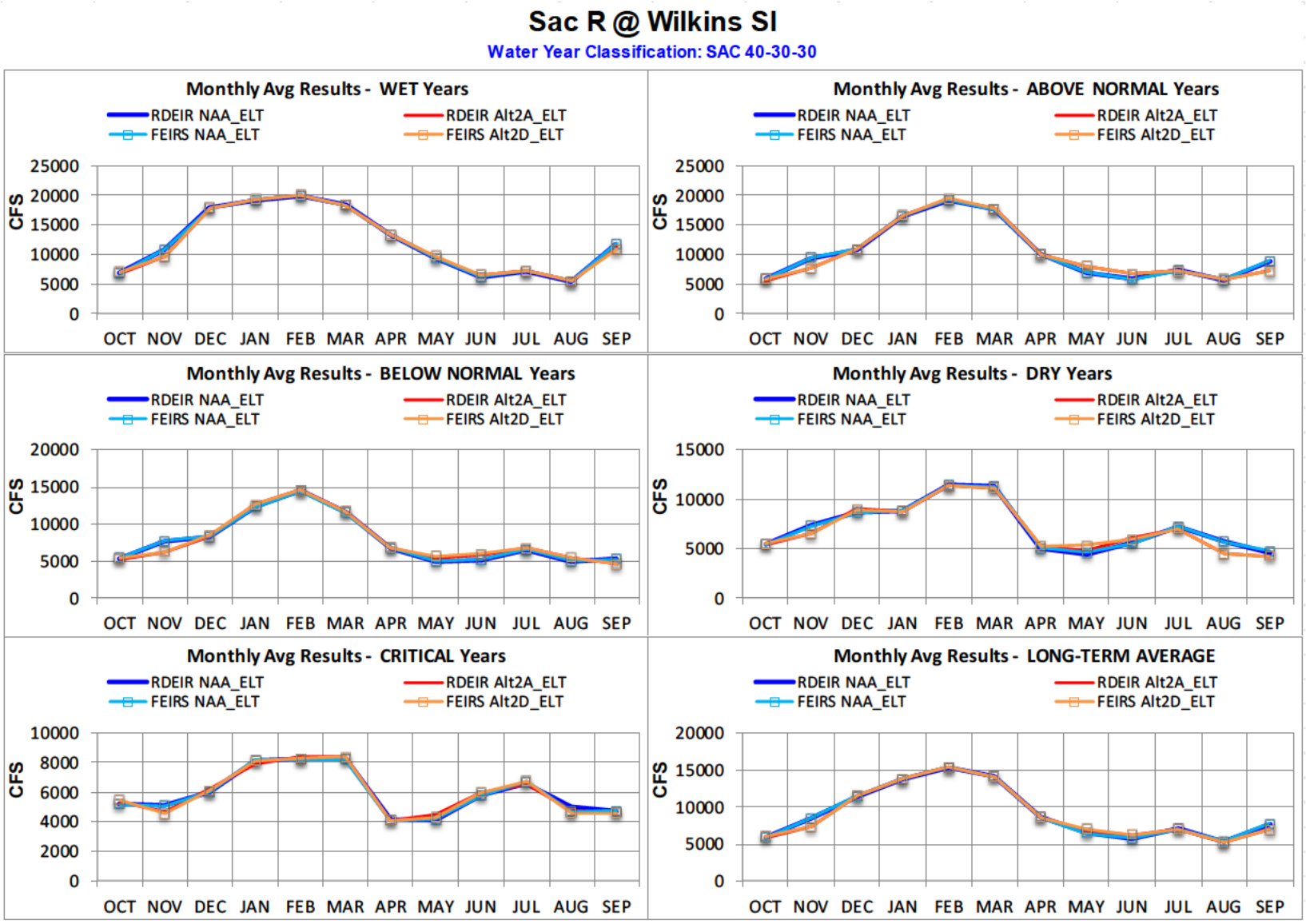

Figure 5F.3-15. Sacramento River at Wilkins Slough, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

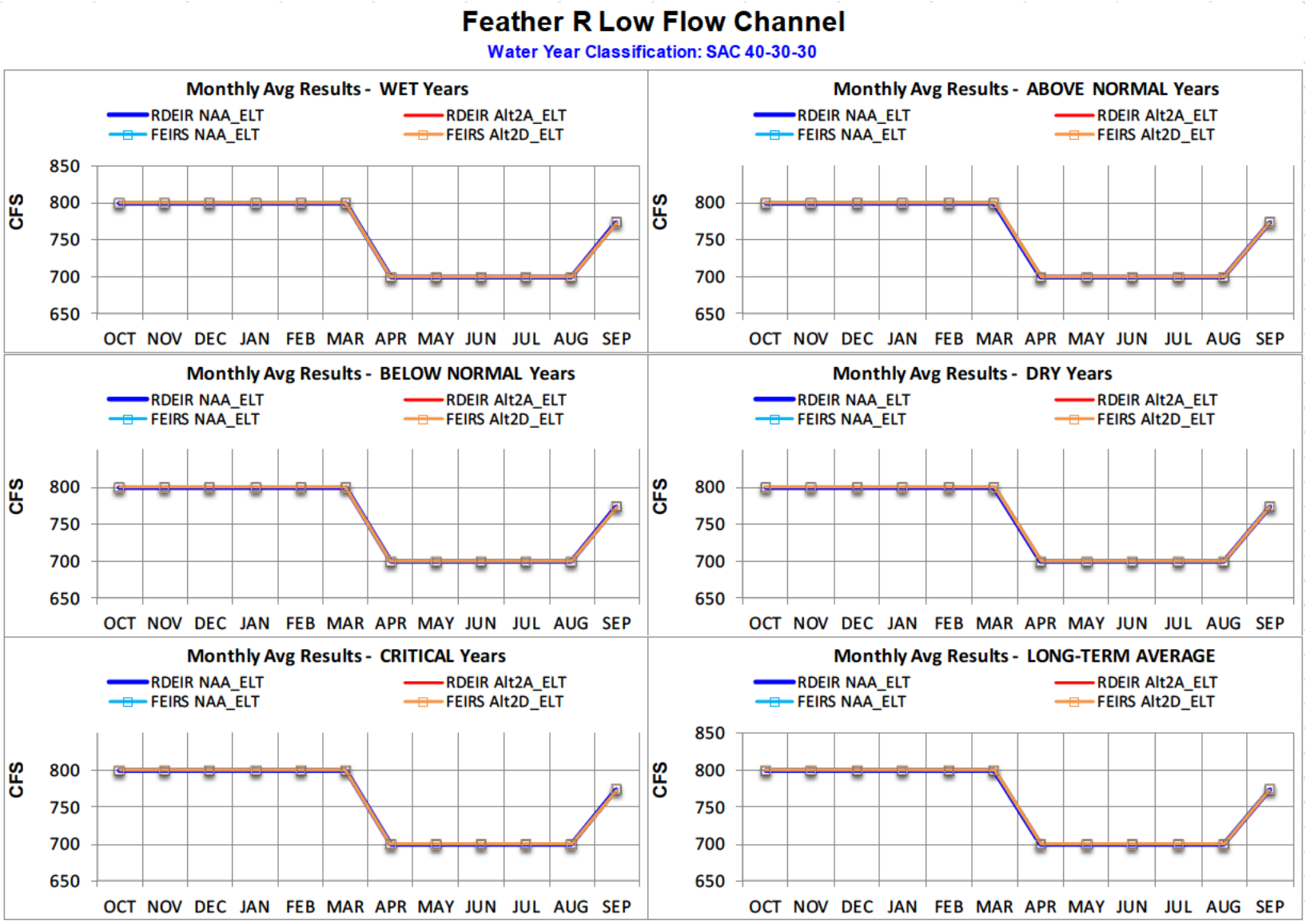

Figure 5F.3-16. Feather River Low Flow Channel, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

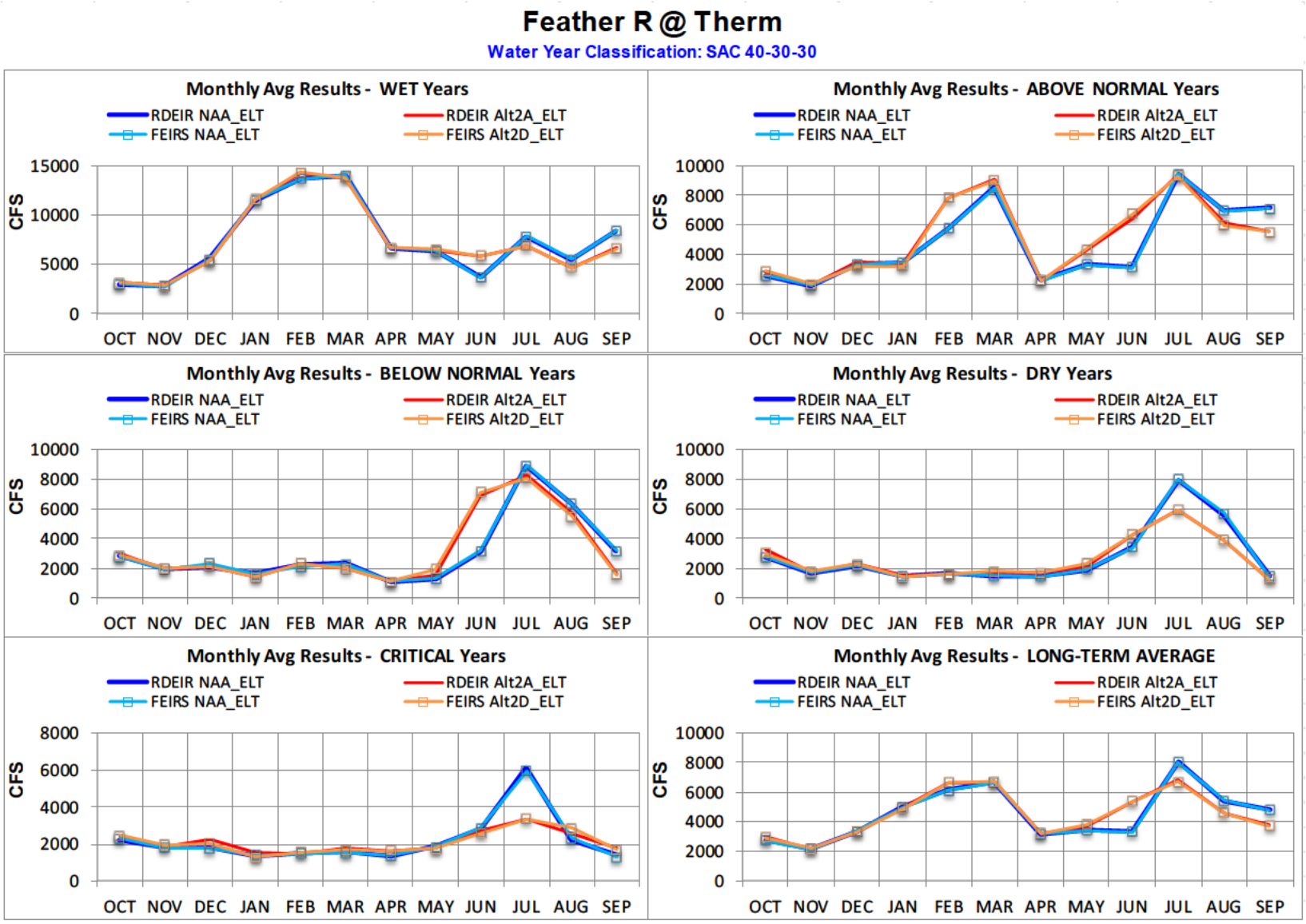

Figure 5F.3-17. Feather River below Thermalito, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

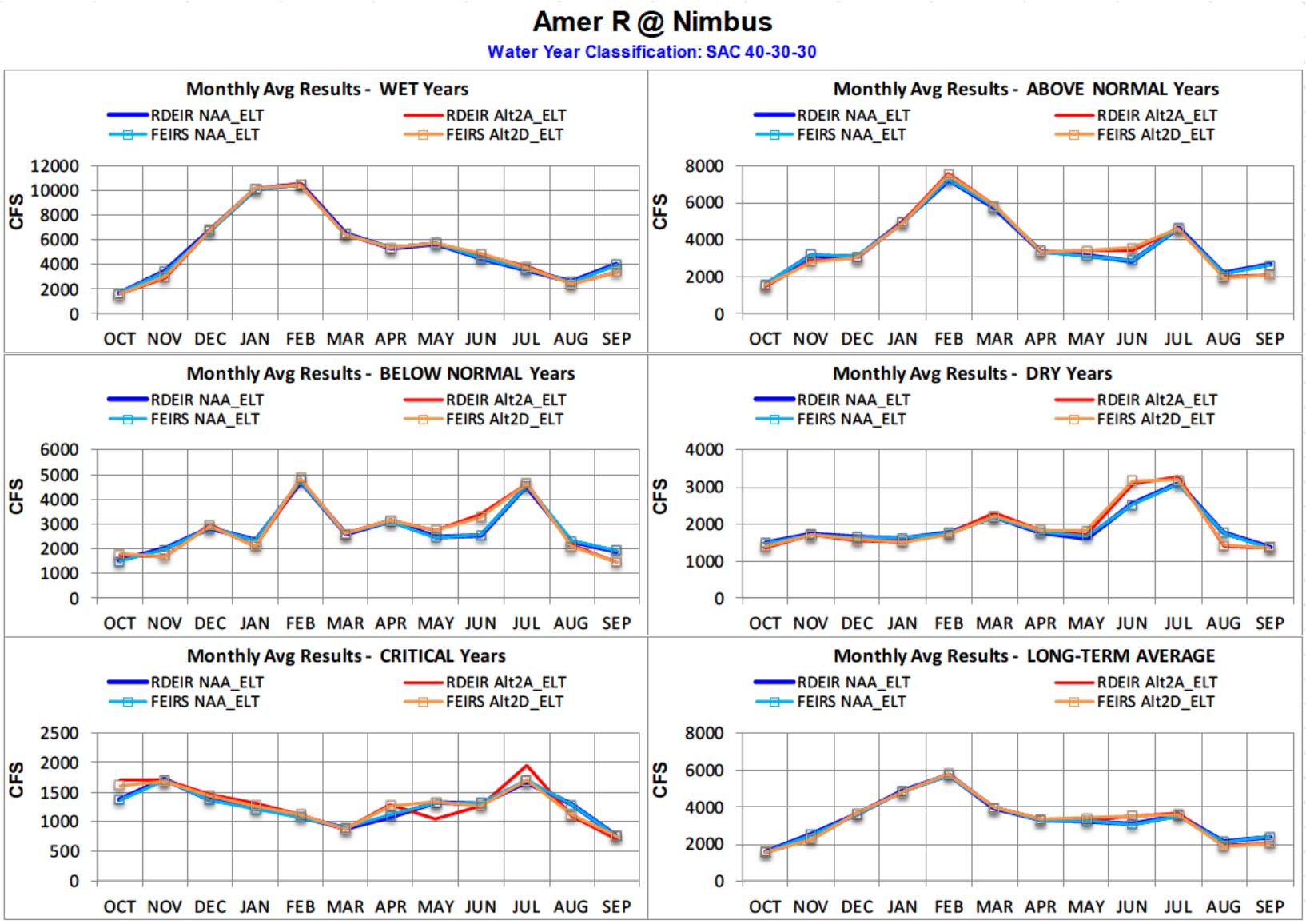

Figure 5F.3-18. American River below Nimbus, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

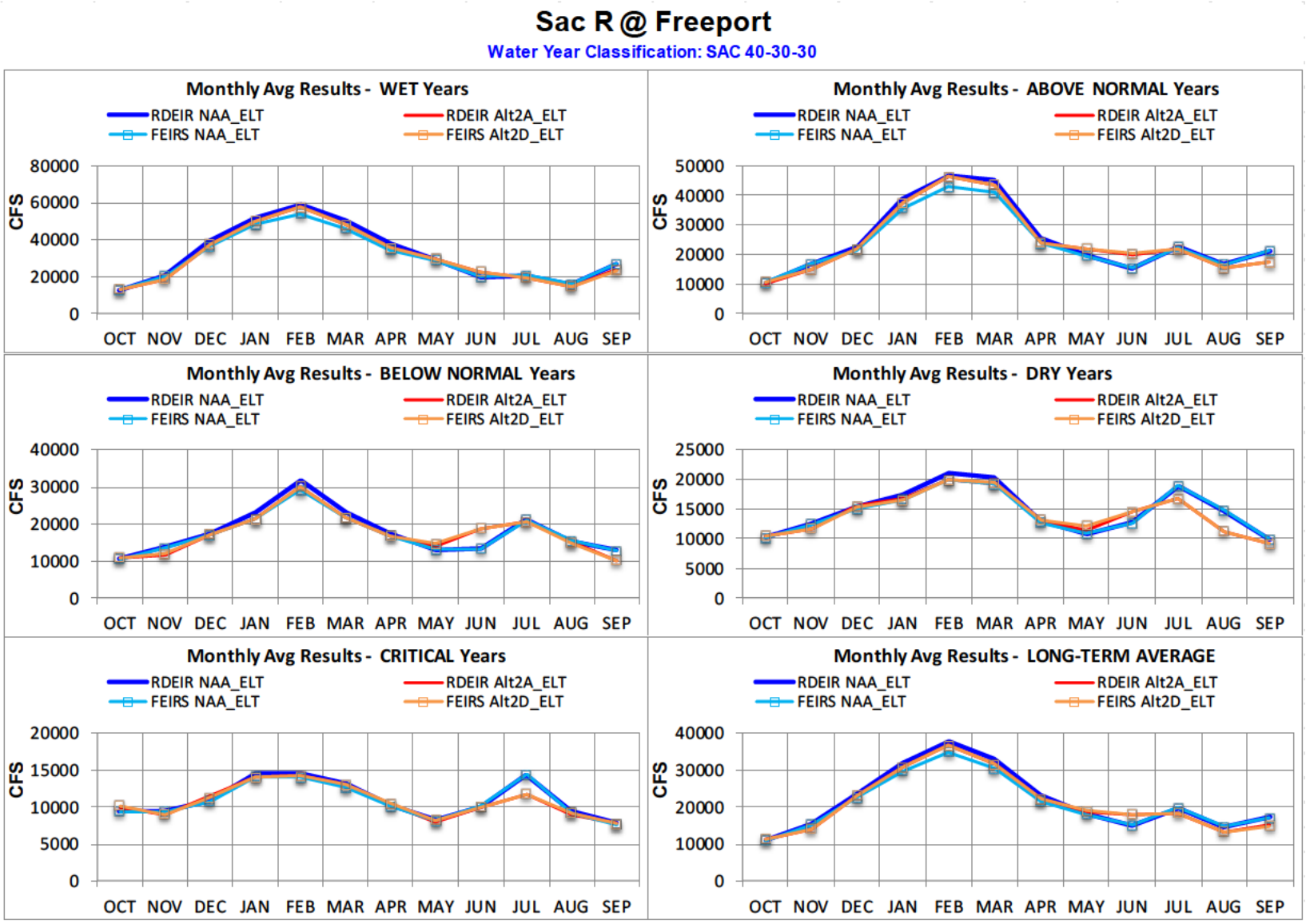

Figure 5F.3-19. Sacramento River at Freeport, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

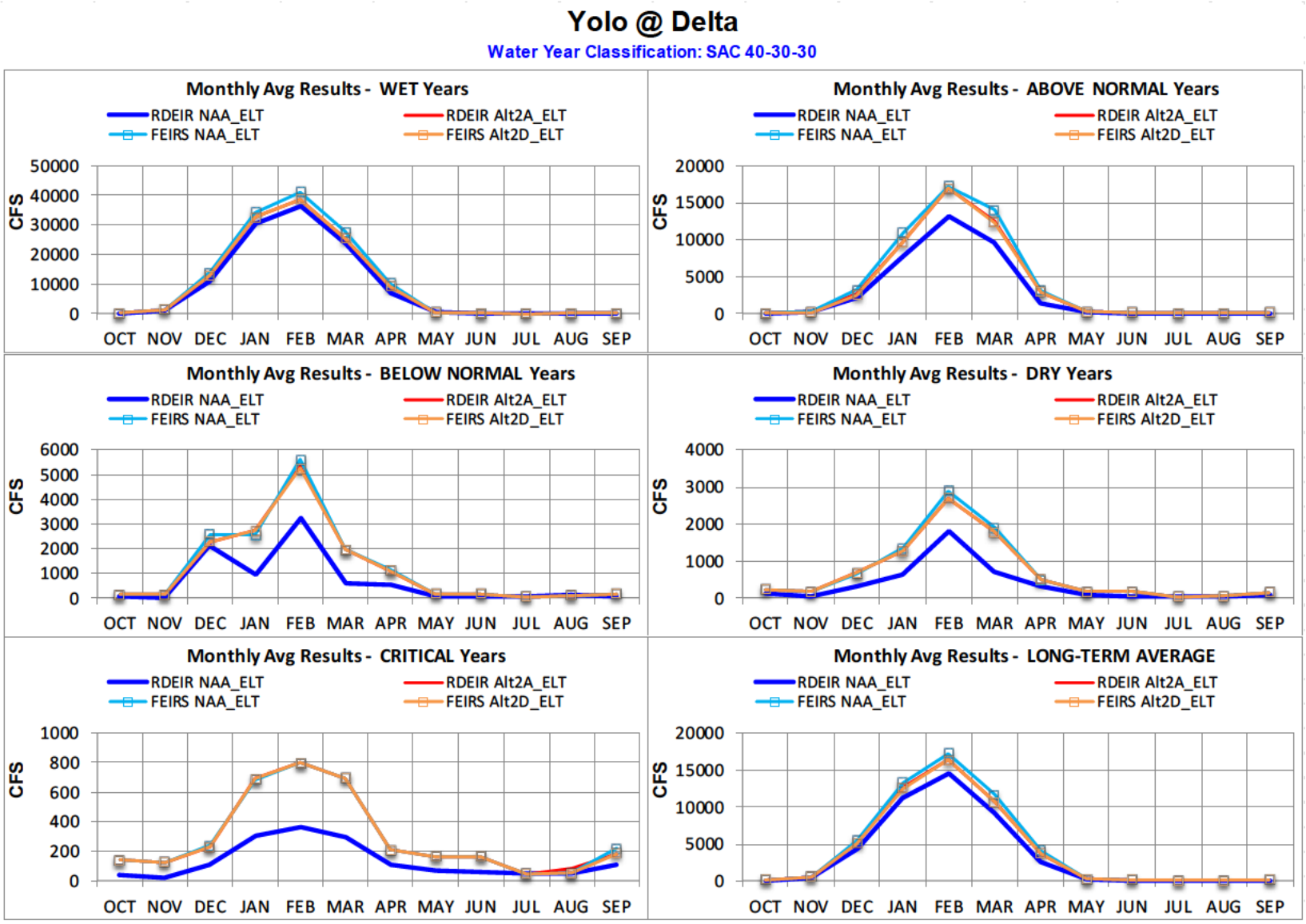

Figure 5F.3-20. Yolo Bypass at Delta, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

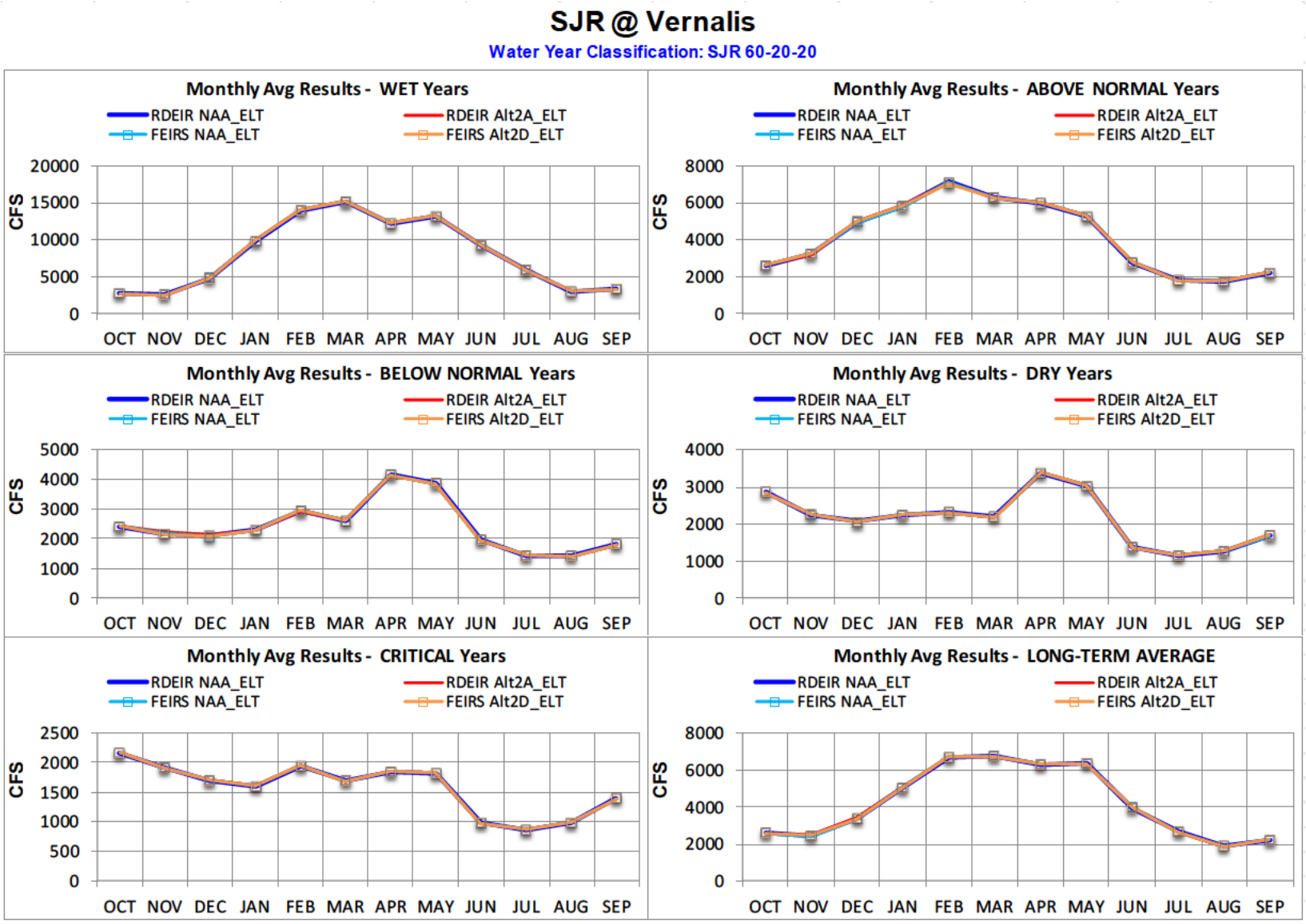

Figure 5F.3-21. San Joaquin River at Vernalis, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

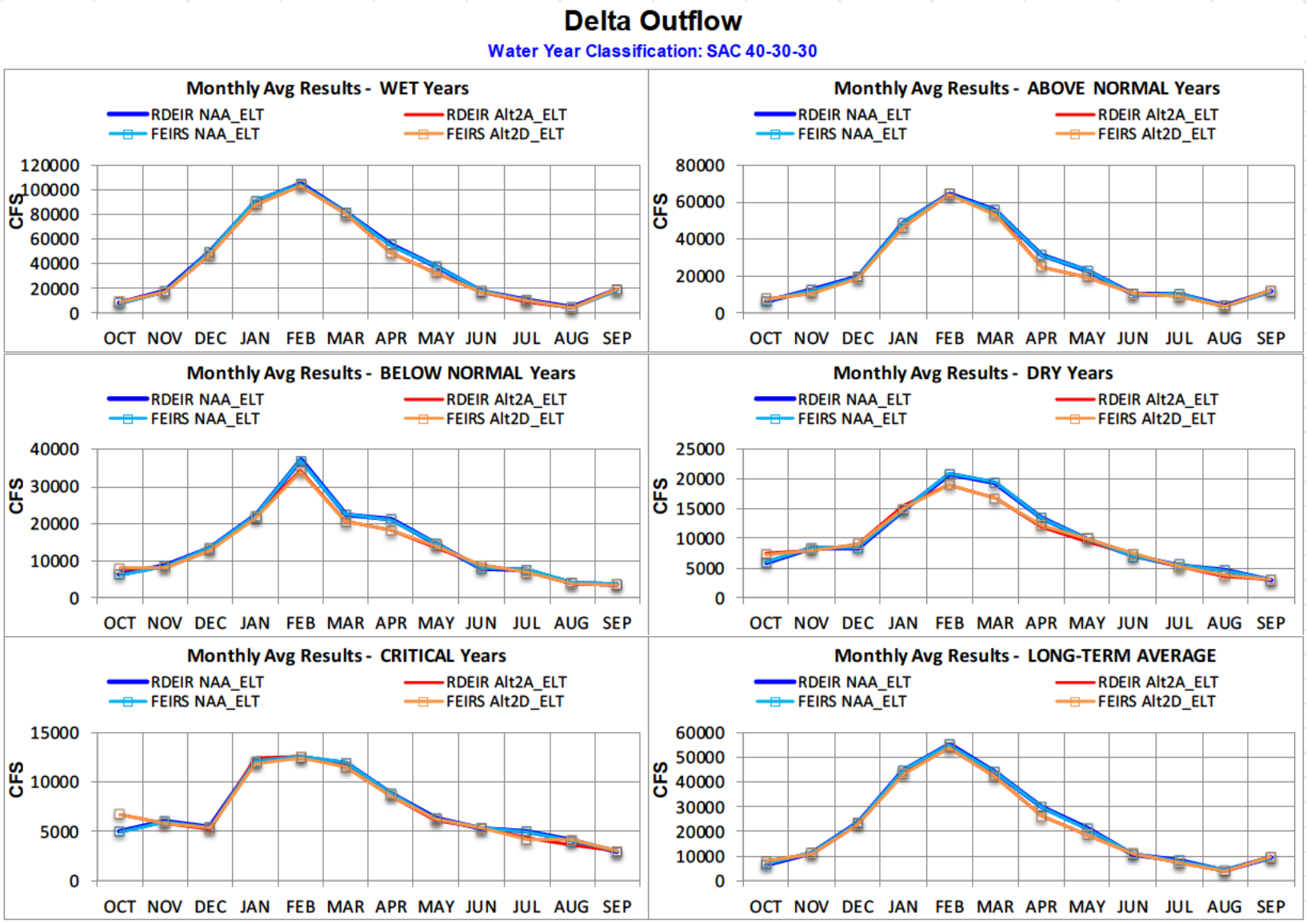

Figure 5F.3-22. Delta Outflow, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

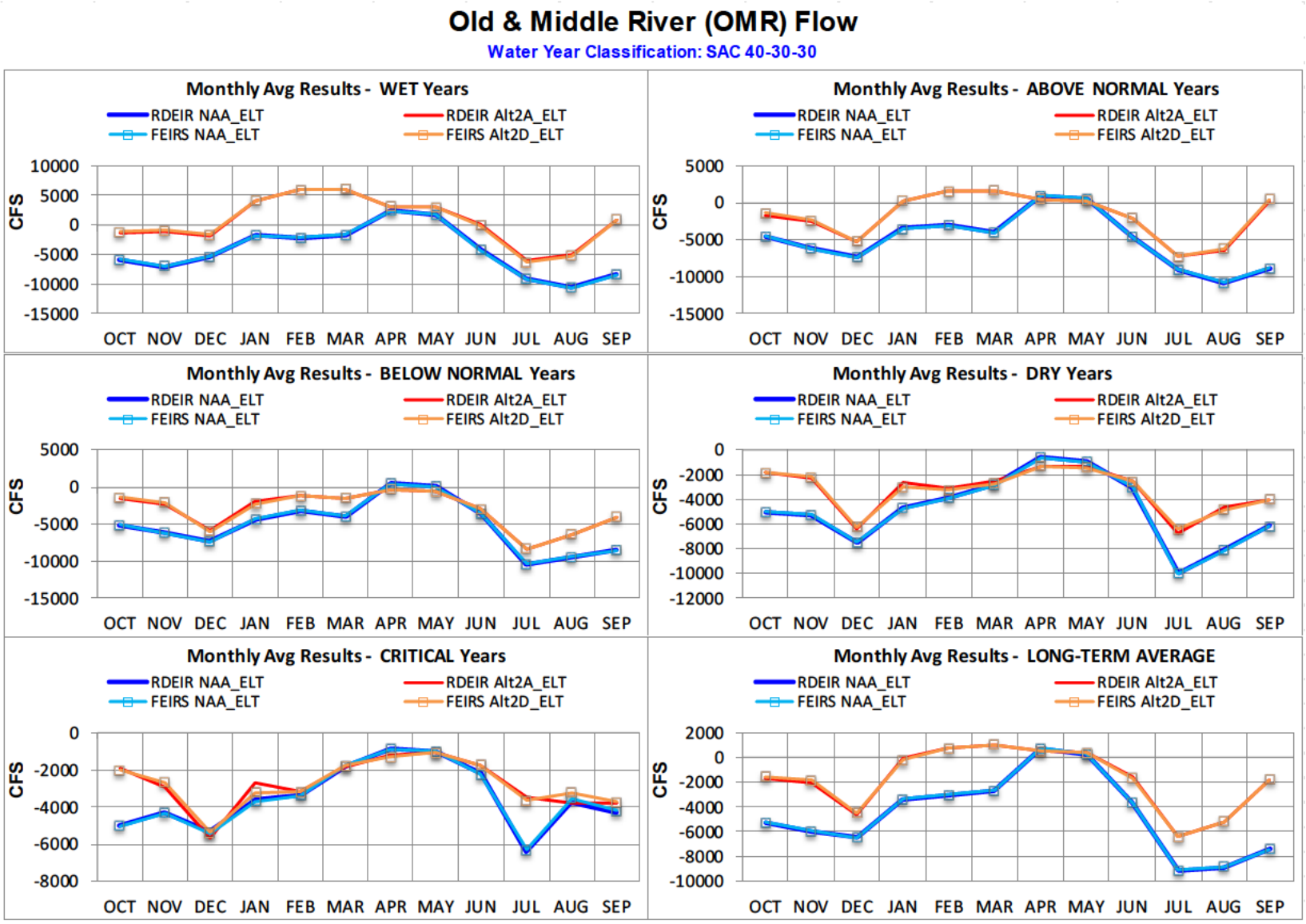

Figure 5F.3-23. Combined Old and Middle River Flow, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

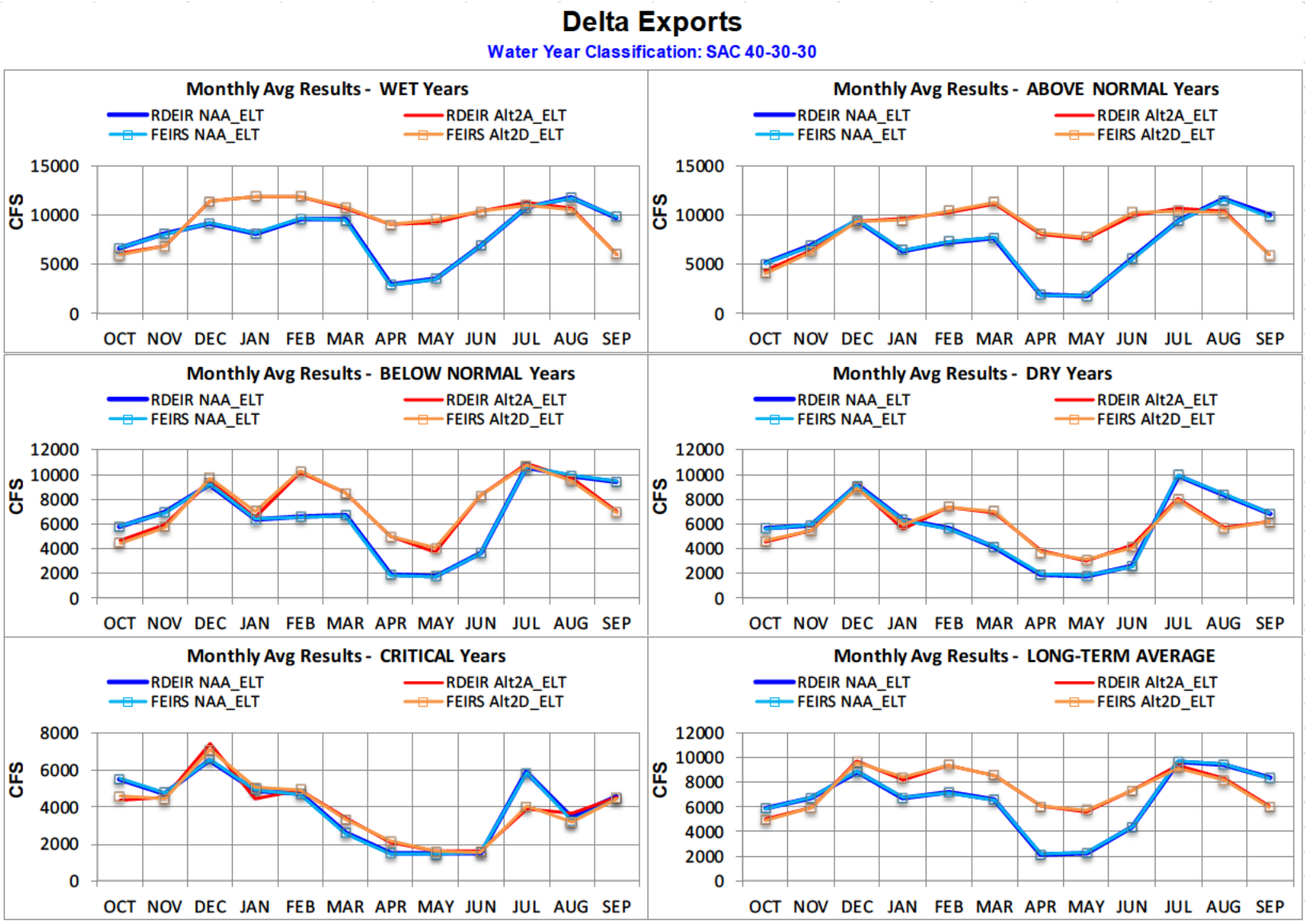

Figure 5F.3-24. Total Delta Exports, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

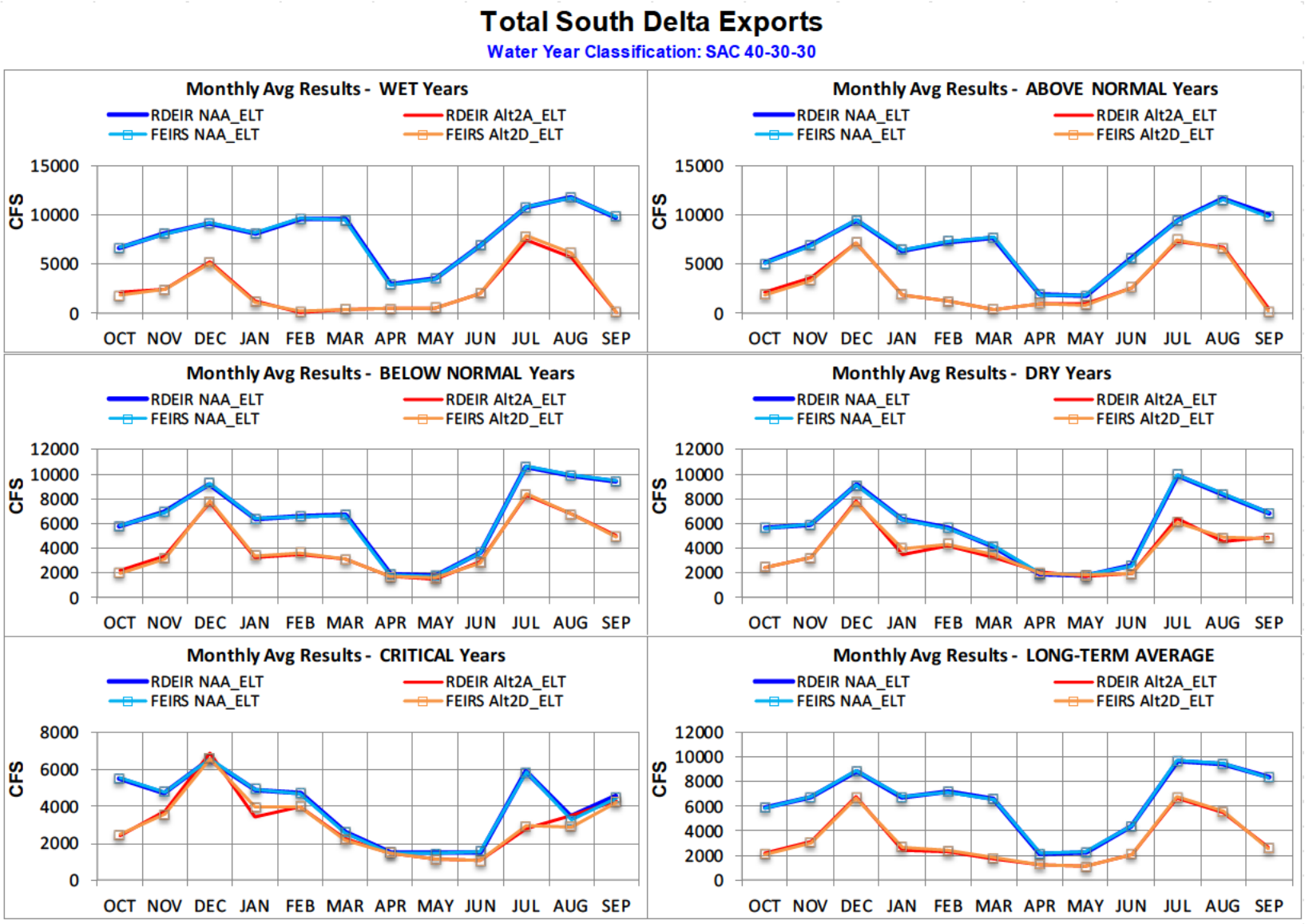

Figure 5F.3-25. Total South Delta Exports, Monthly Average Flow (Alt2D ELT) *[WYT based on current climate]*

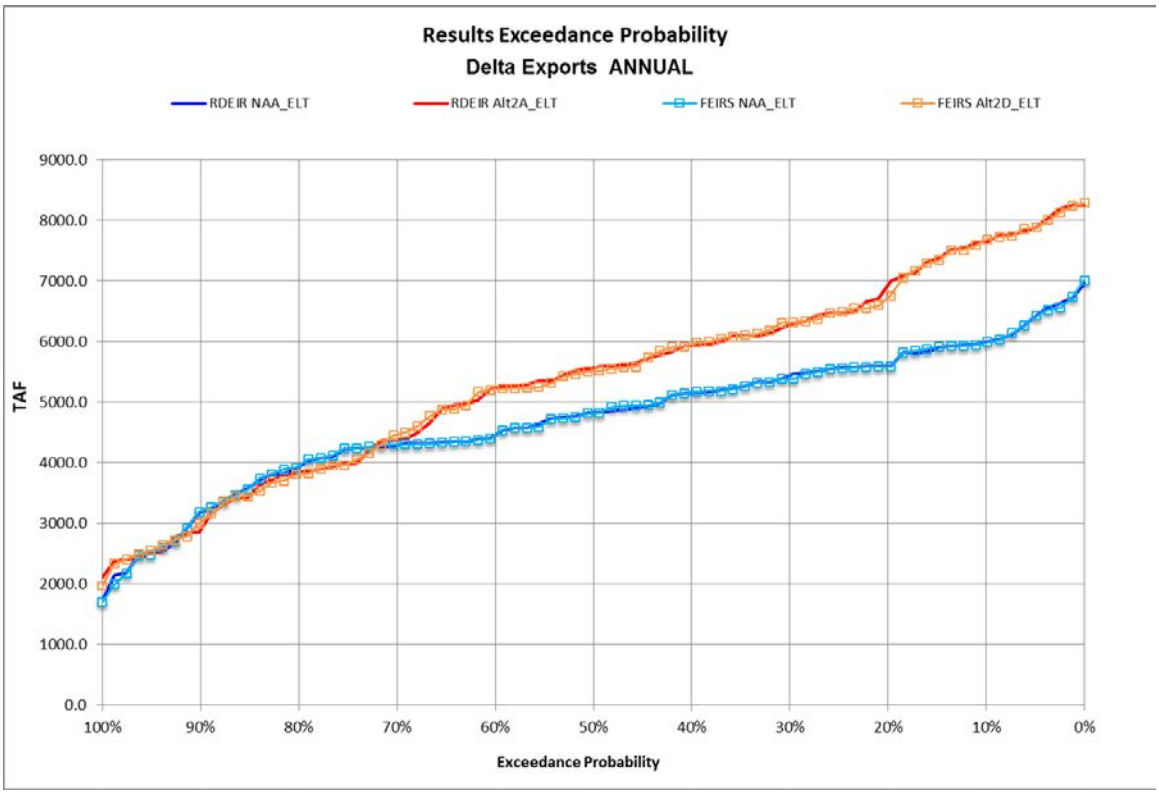

Figure 5F.3-26. Annual (Oct-Sep) Delta Exports Exceedance Probability (Alt2D ELT)

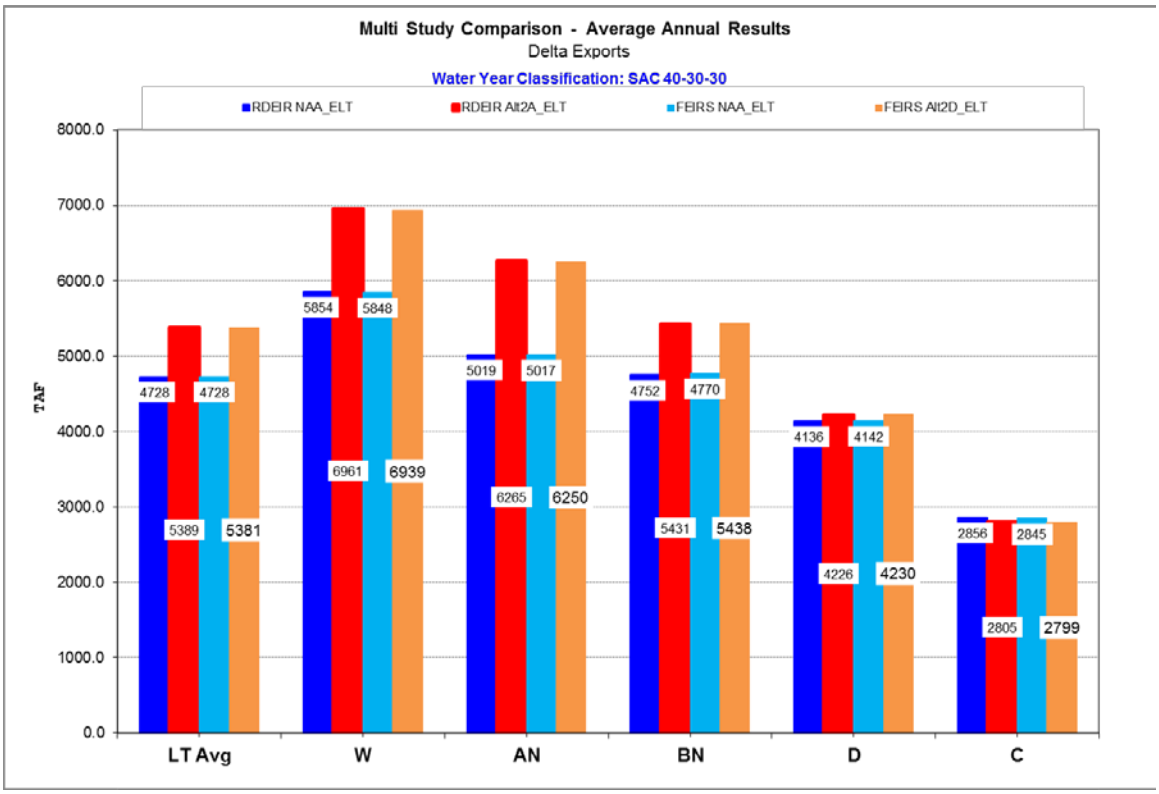

Figure 5F.3-27. Annual (Oct-Sep) Delta Exports by WYT (Alt2D ELT) *[WYT based on current climate]*

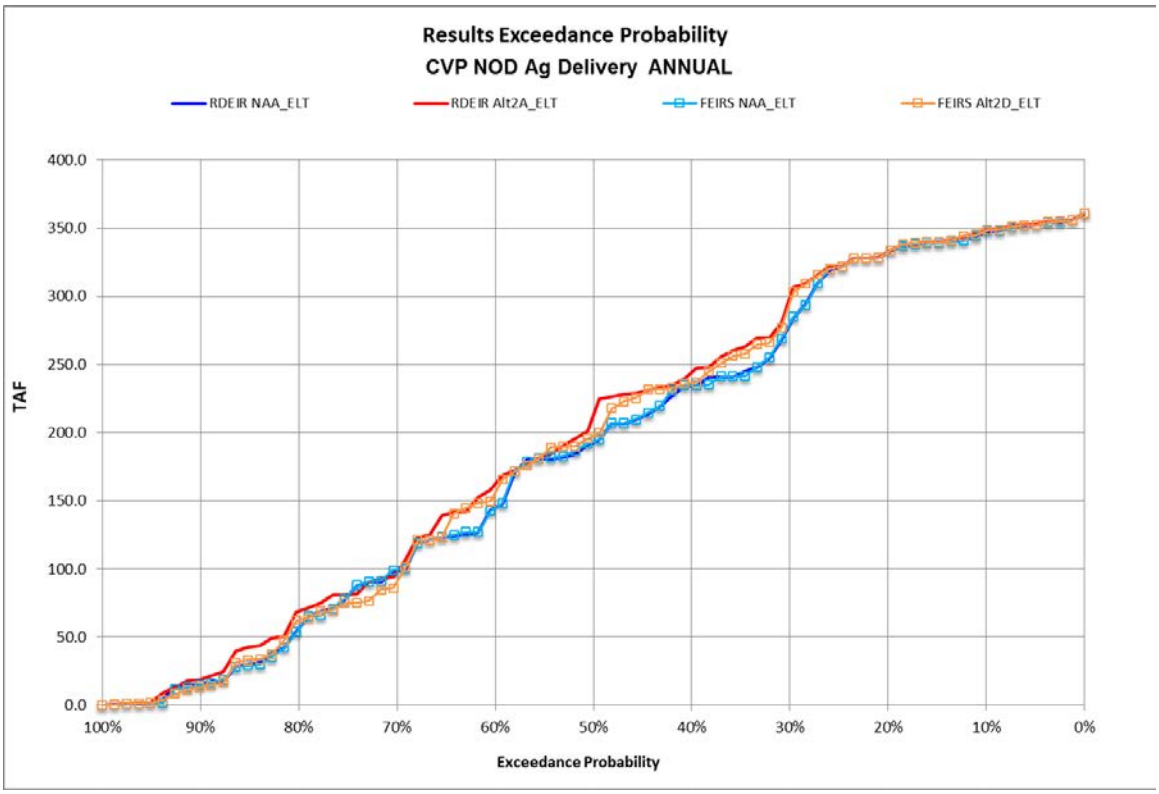

Figure 5F.3-28. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries Exceedance Probability (Alt2D ELT)

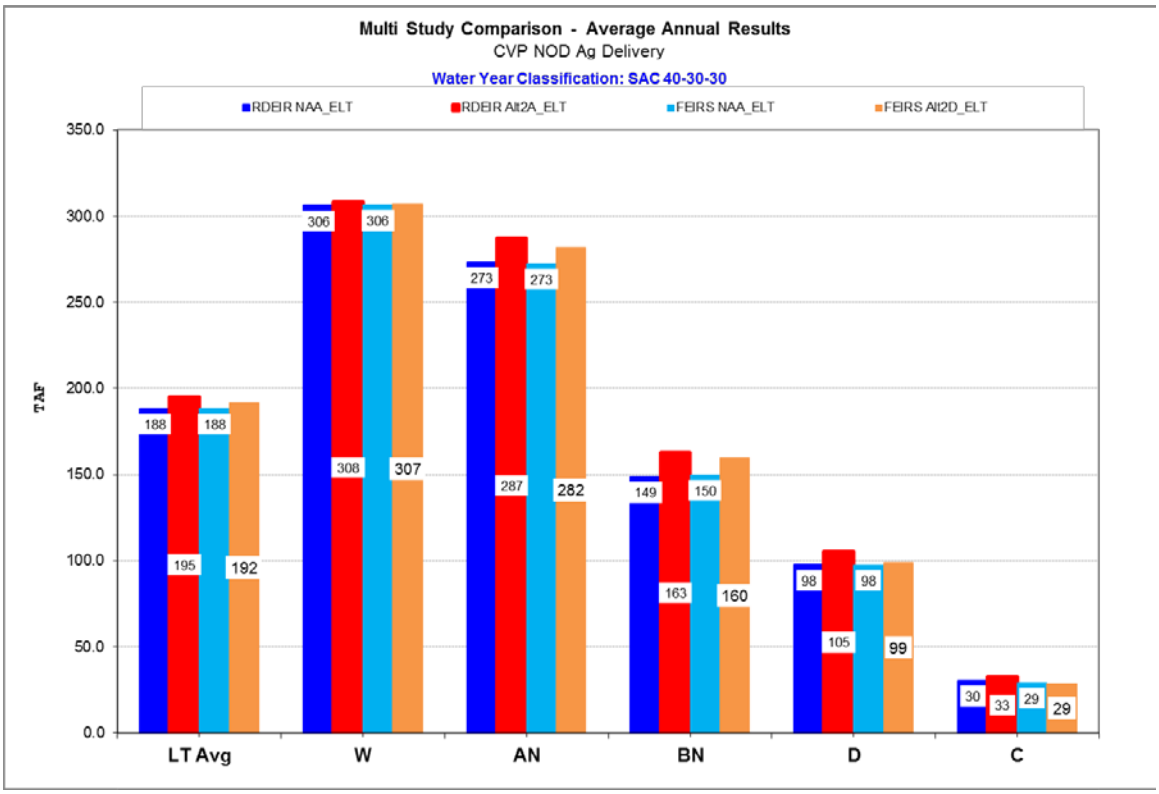

Figure 5F.3-29. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries by WYT (Alt2D ELT)
[WYT per current climate]

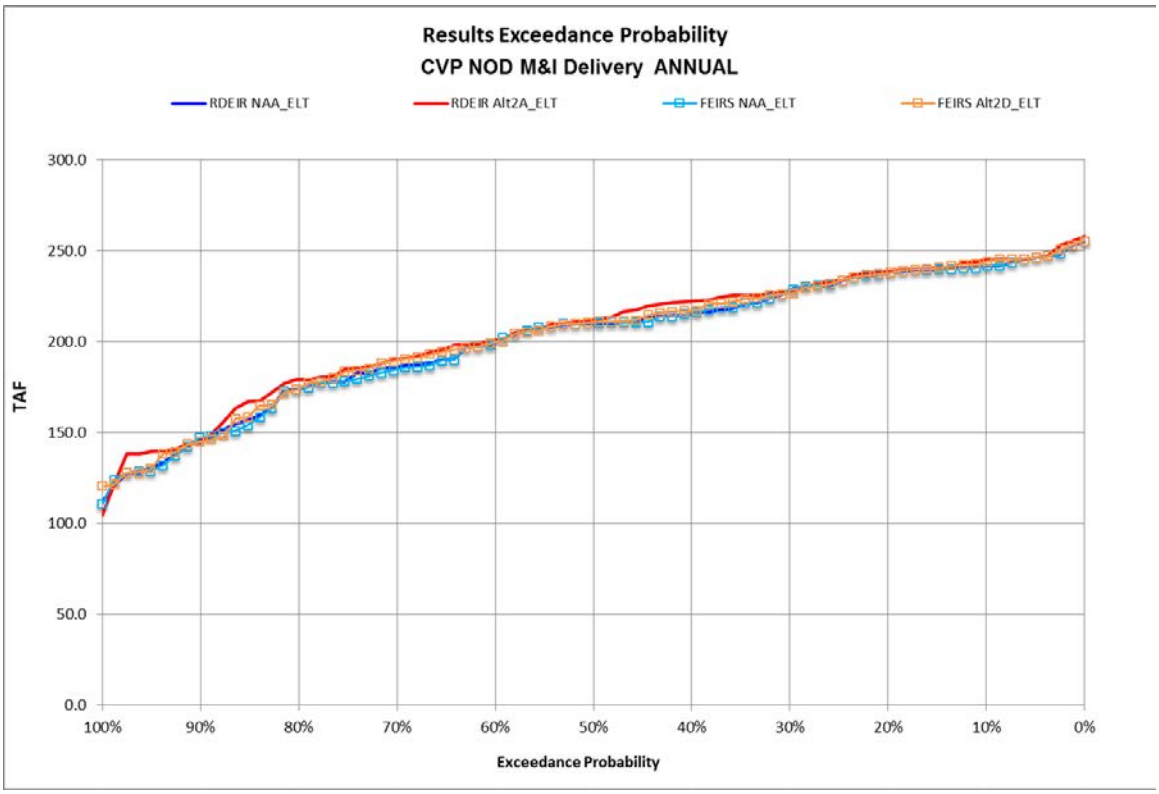

Figure 5F.3-30. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries Exceedance Probability (Alt2D ELT)

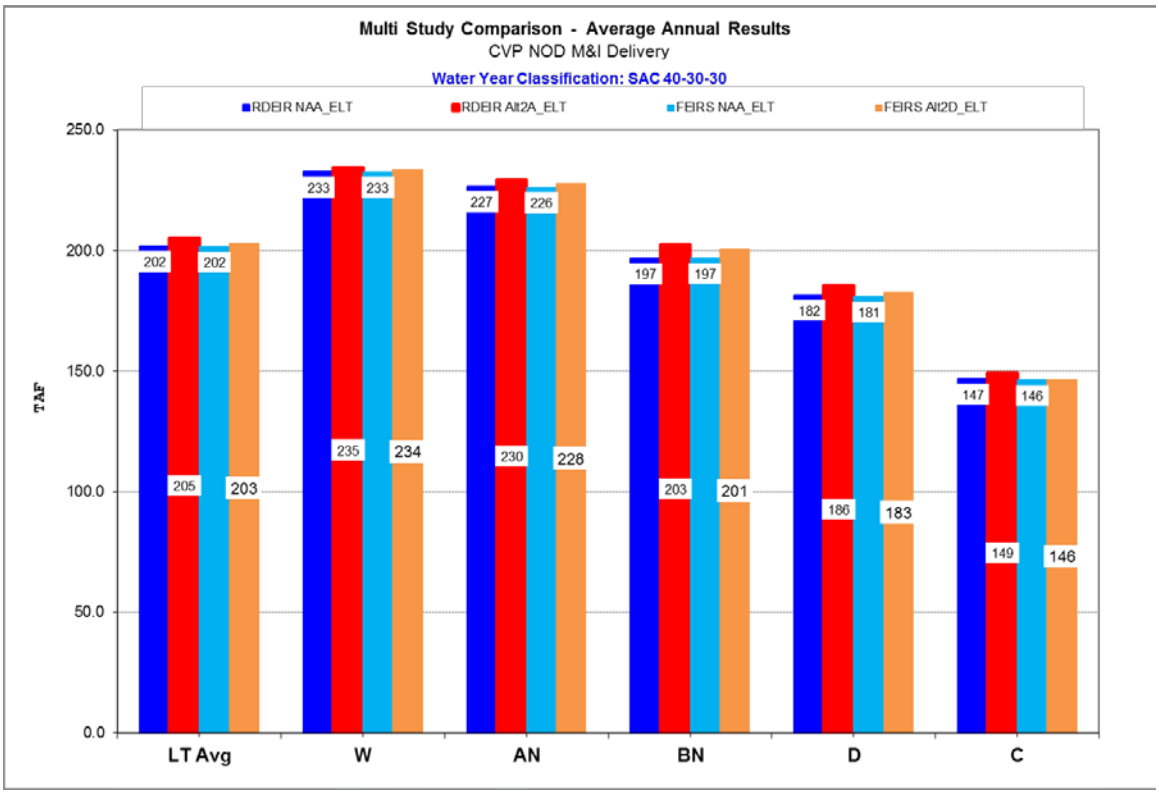

Figure 5F.3-31. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries (Alt2D ELT) *[WYT per current climate]*

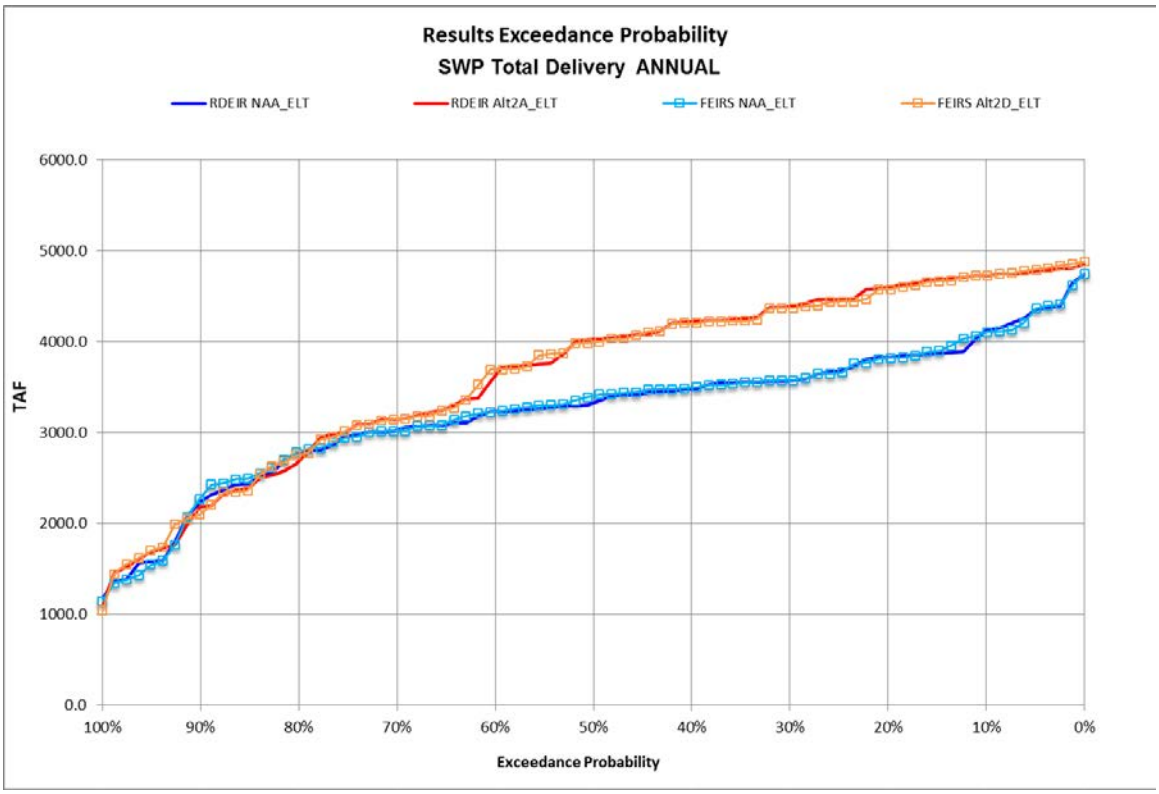

Figure 5F.3-32. Annual (Oct-Sep) SWP Total Deliveries Exceedance Probability (Alt2D ELT)

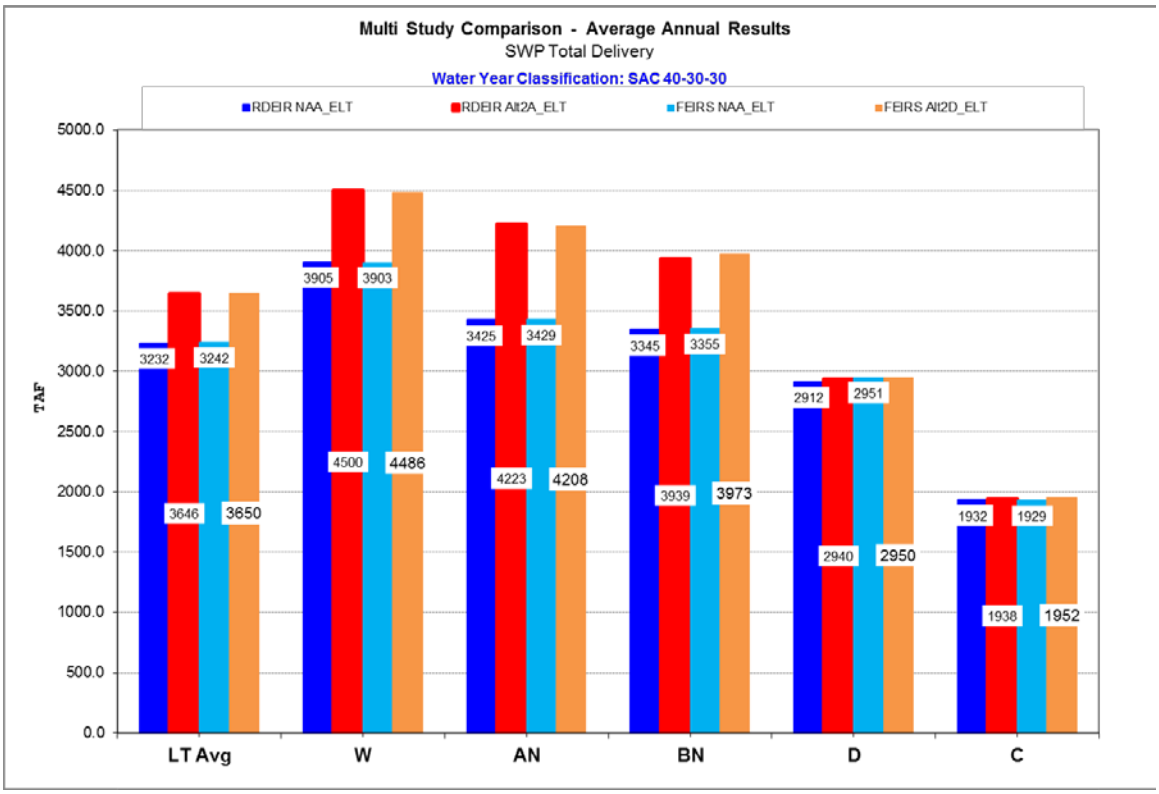

Figure 5F.3-33. Annual (Oct-Sep) SWP Total Deliveries (Alt2D ELT) by WYT *[WYT per current climate]*

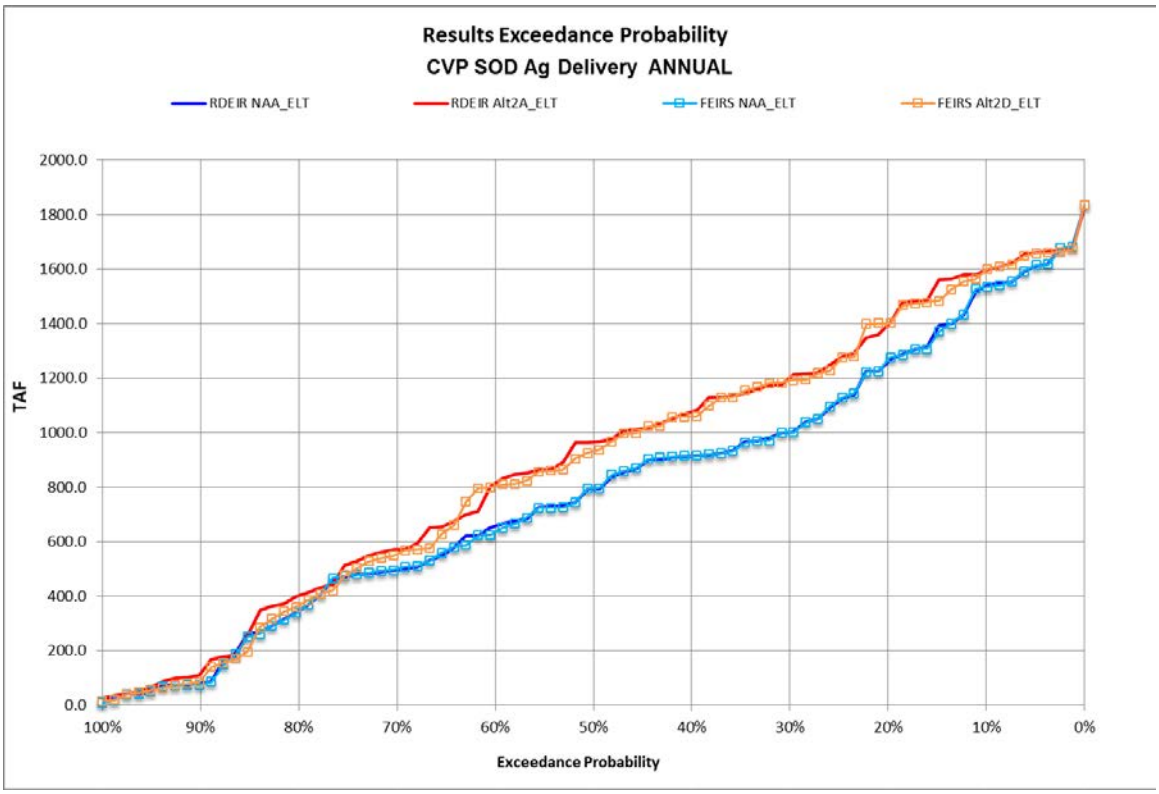

Figure 5F.3-34. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries Exceedance Probability (Alt2D ELT)

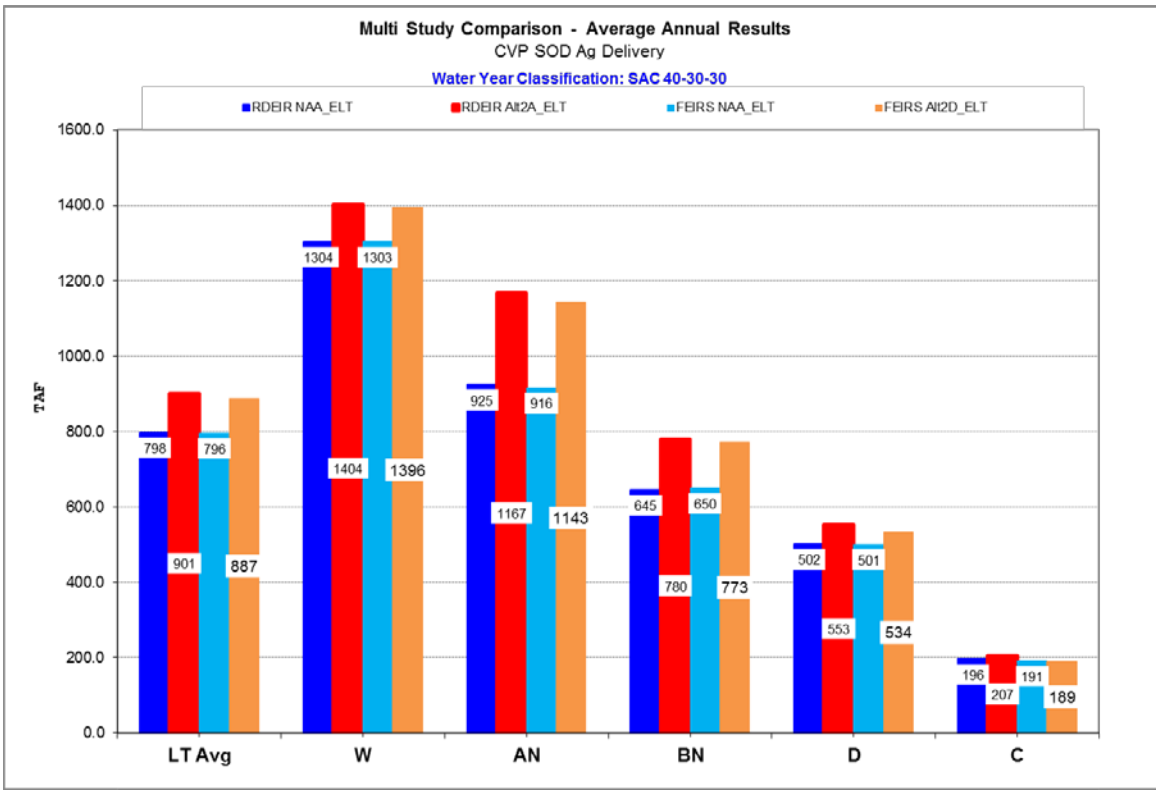

Figure 5F.3-35. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries by WYT (Alt2D ELT)
[WYT per current climate]

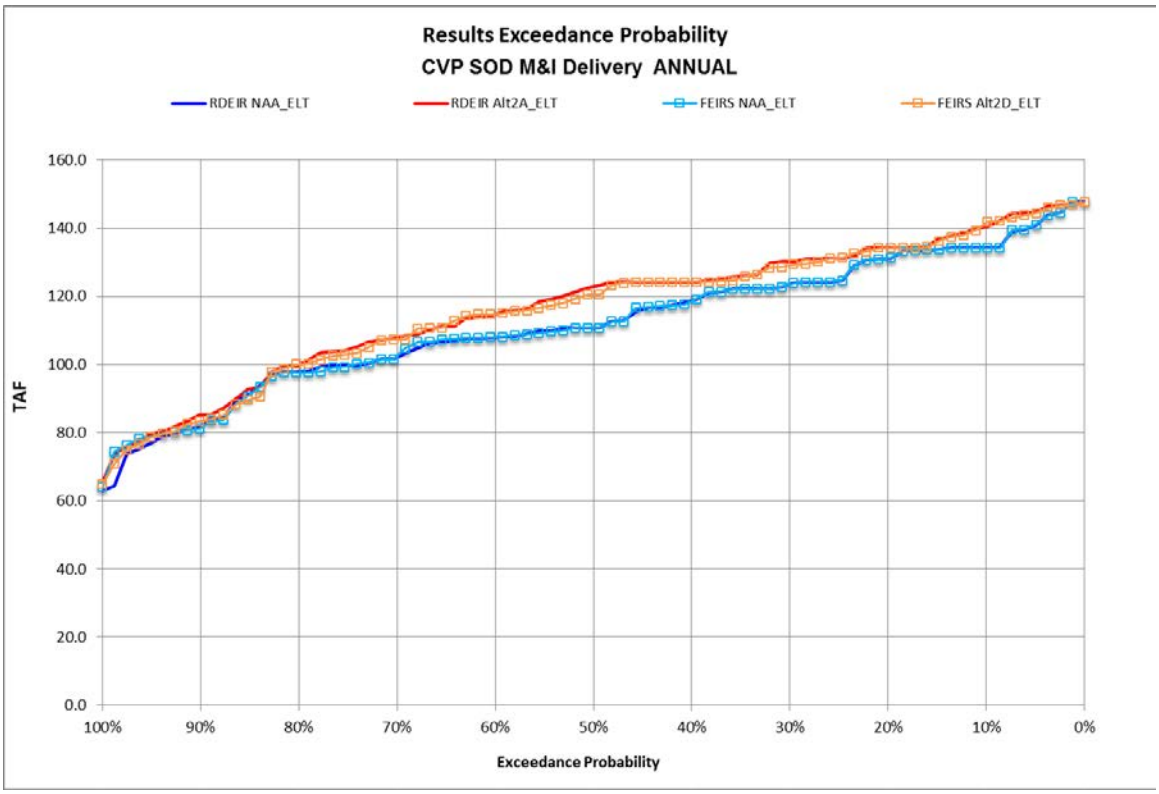

Figure 5F.3-36. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries Exceedance Probability (Alt2D ELT)

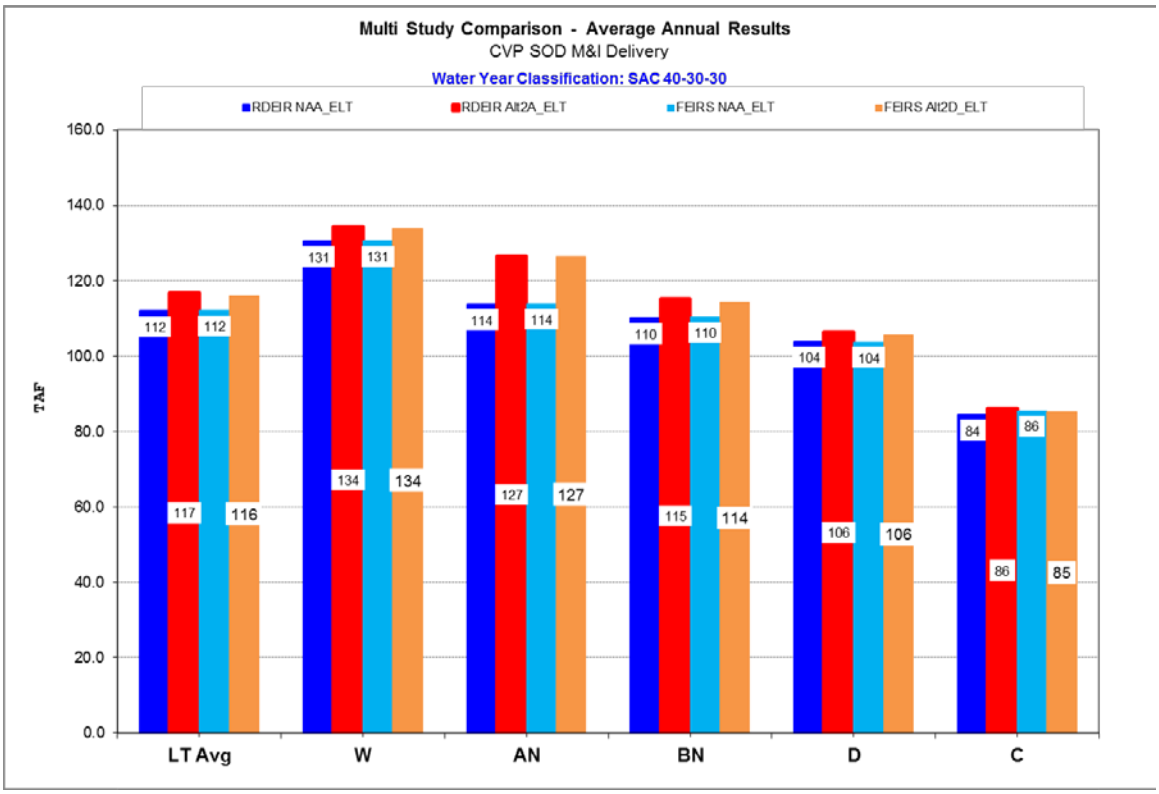

Figure 5F.3-37. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries (Alt2D ELT) *[WYT per current climate]*

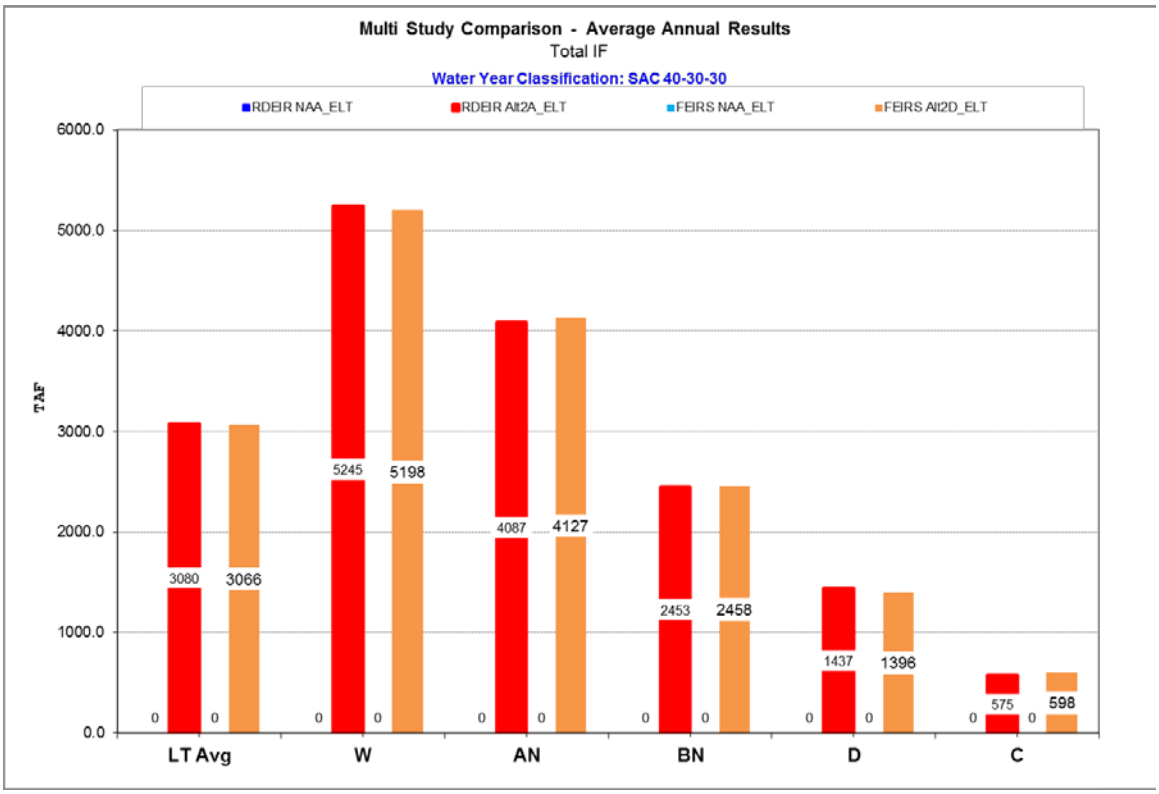

Figure 5F.3-38. Annual (Oct-Sep) Diversion at North Delta Intakes by WYT (Alt2D ELT) *[WYT per current climate]*

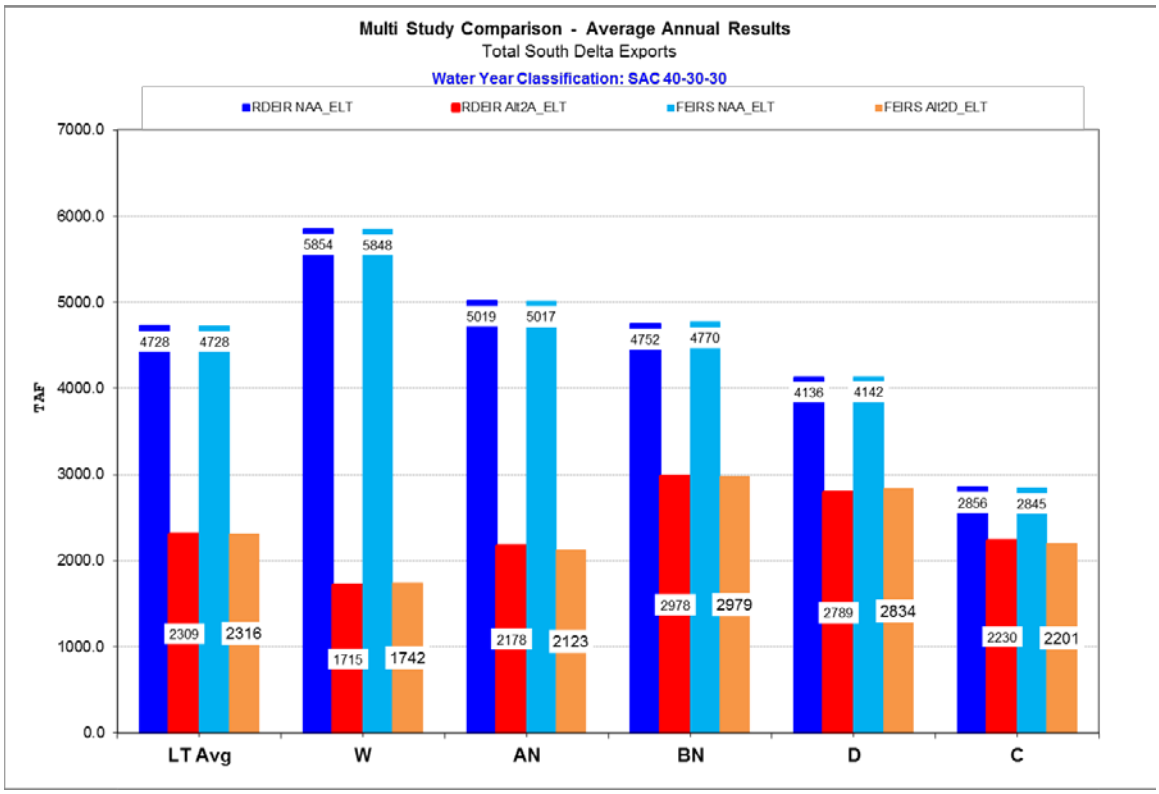

Figure 5F.3-39. Annual (Oct-Sep) Exports at South Delta Intakes by WYT (Alt2D ELT) *[WYT per current climate]*

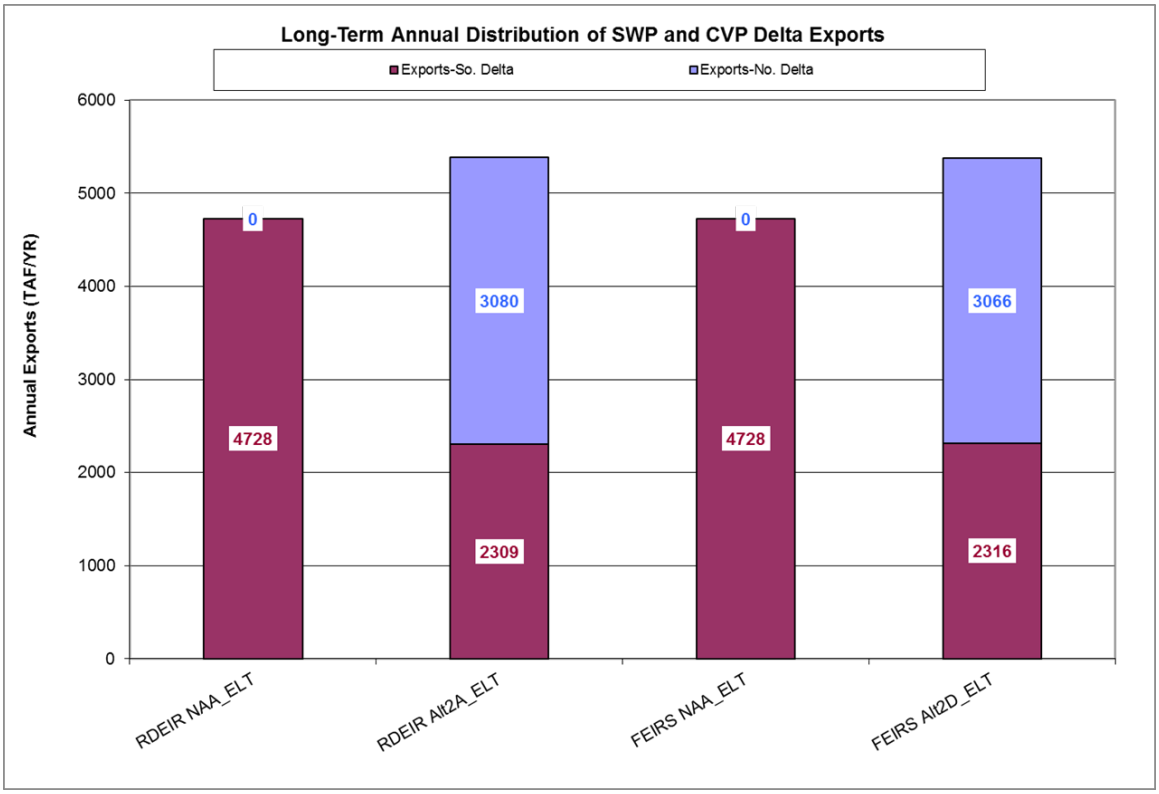

Figure 5F.3-40. Long-term Annual Distribution of Delta Exports at North and South Delta Intakes (Alt2D ELT).

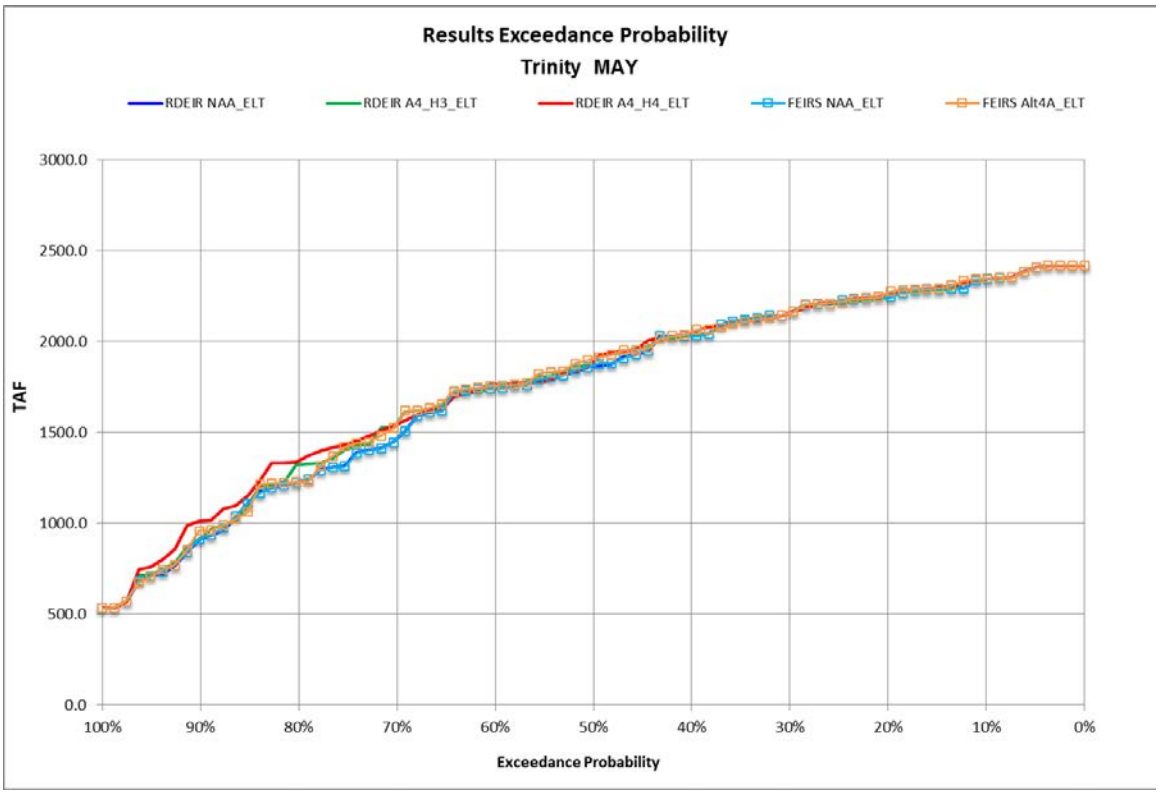

Figure 5F.4-1. Storage Exceedance Probability for Trinity Lake, End of May (Alt4A ELT)

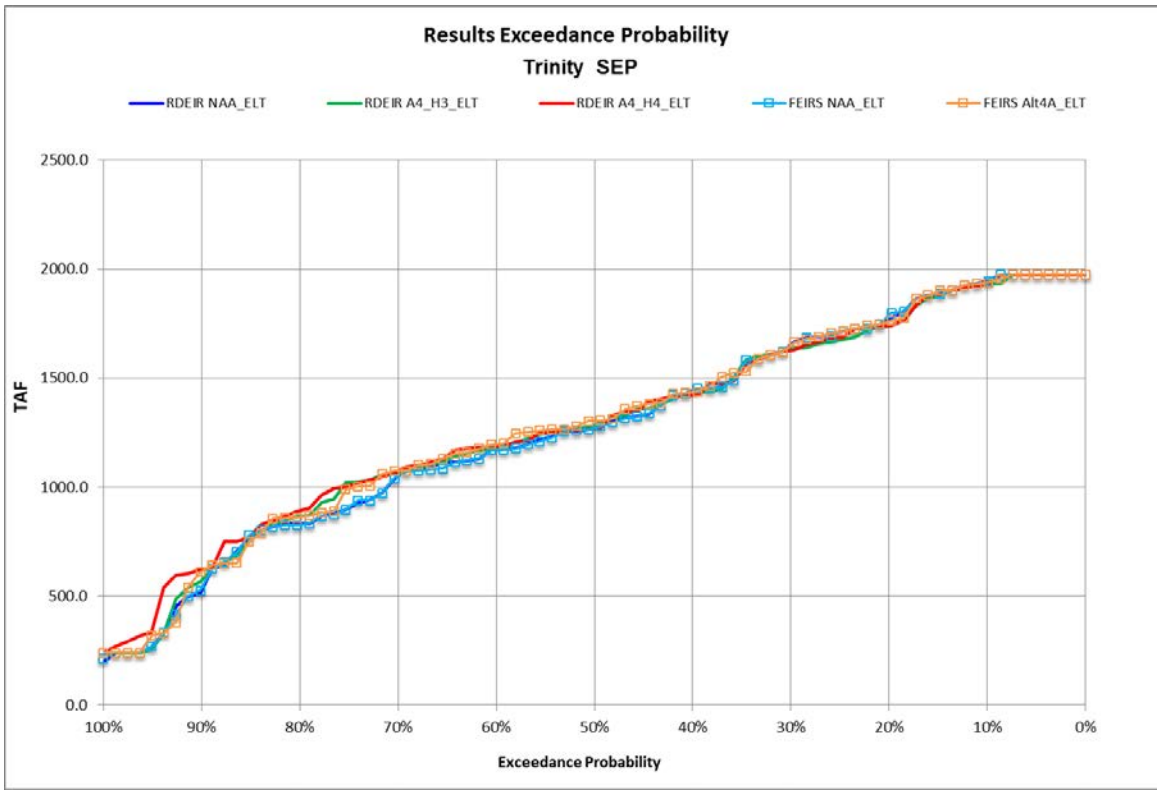

Figure 5F.4-2. Storage Exceedance Probability for Trinity Lake, End of September (Alt4A ELT)

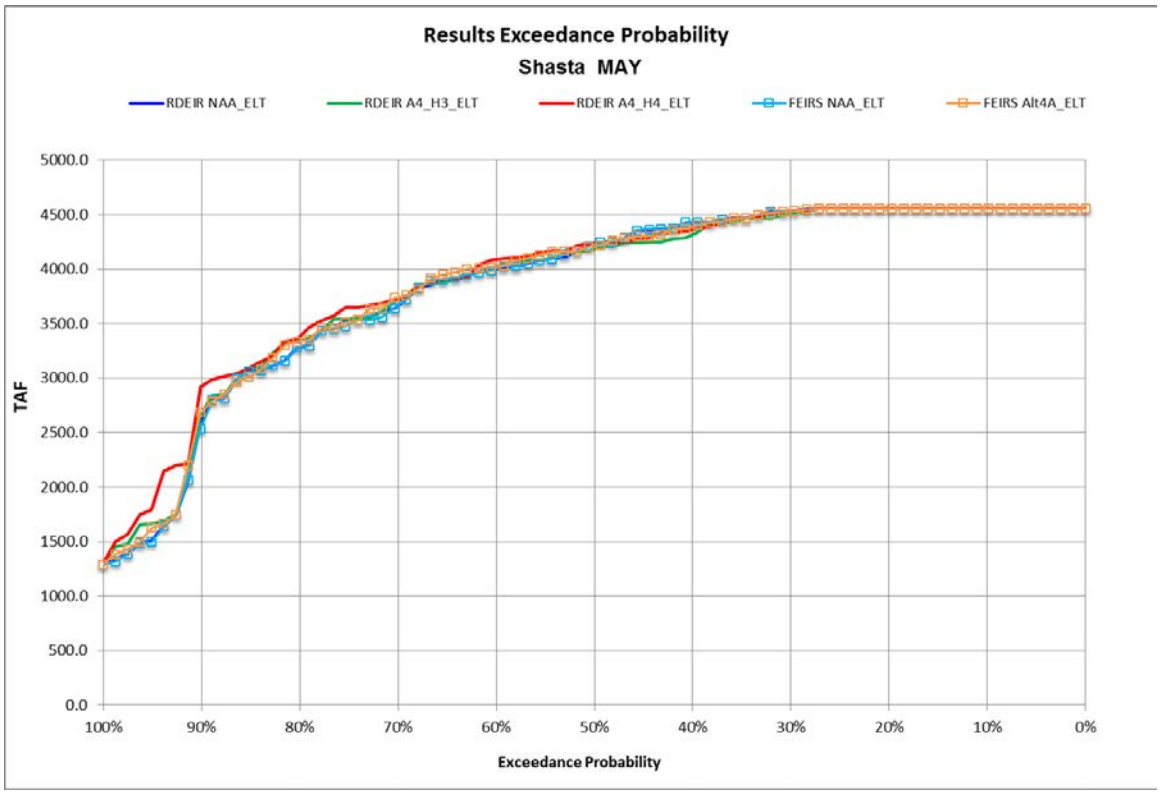

Figure 5F.4-3. Storage Exceedance Probability for Shasta Lake, End of May (Alt4A ELT)

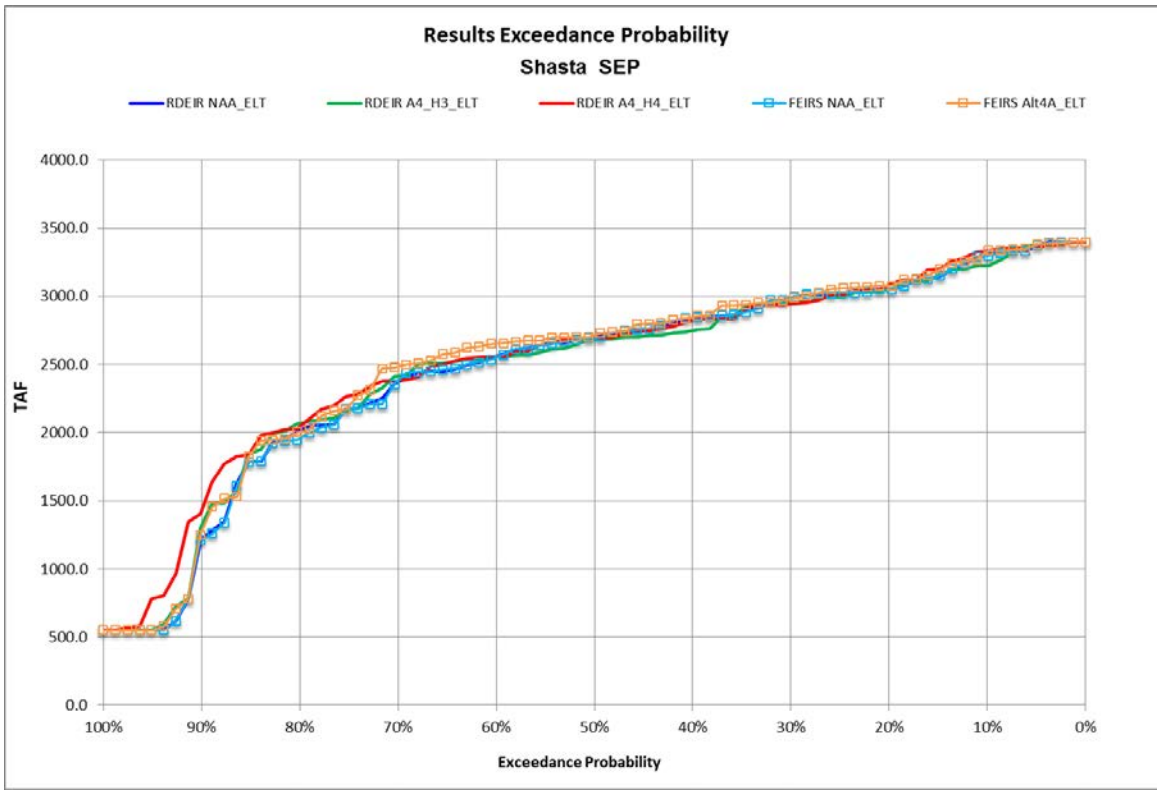

Figure 5F.4-4. Storage Exceedance Probability for Shasta Lake, End of September (Alt4A ELT)

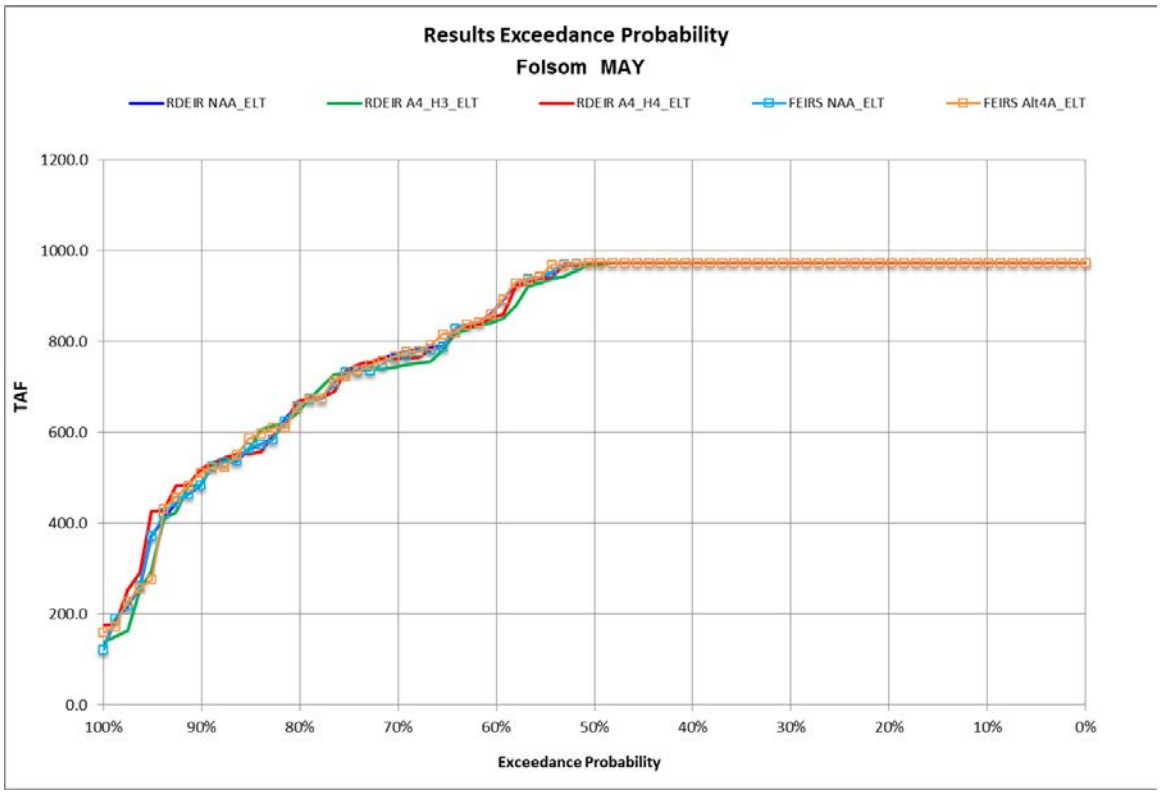

Figure 5F.4-5. Storage Exceedance Probability for Folsom Lake, End of May (Alt4A ELT)

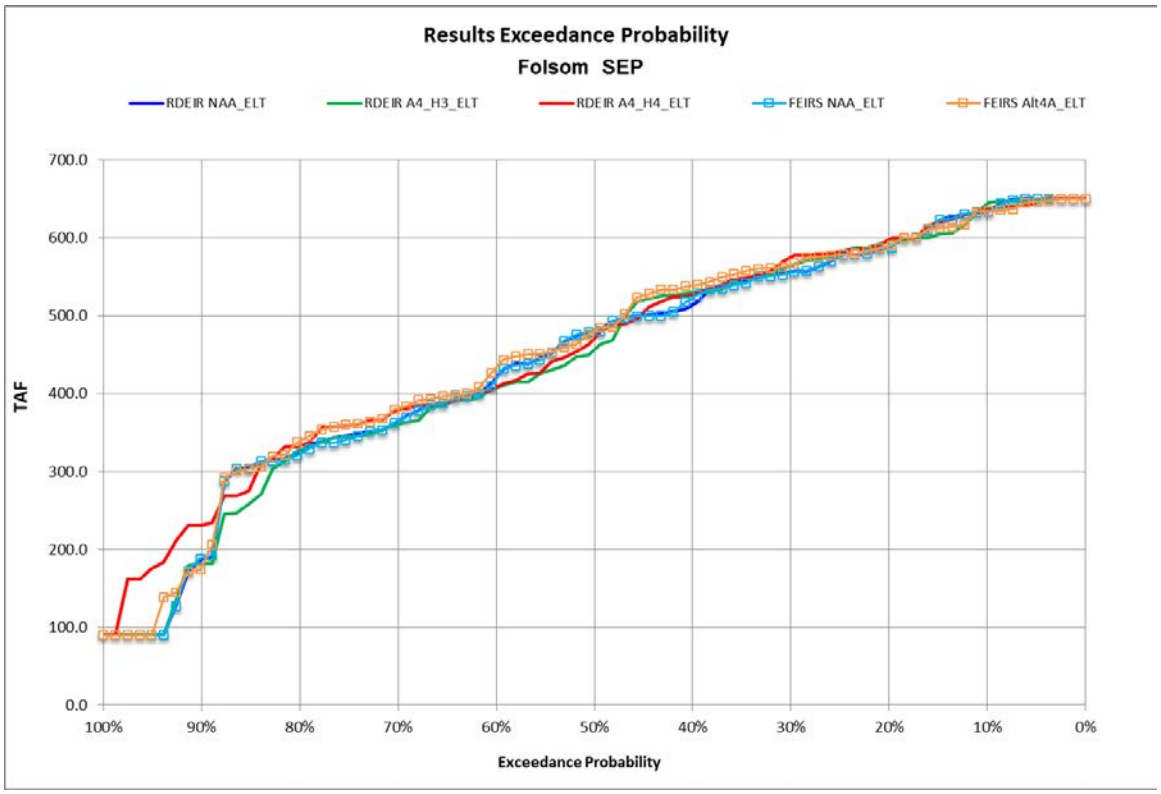

Figure 5F.4-6. Storage Exceedance Probability for Folsom Lake, End of September (Alt4A ELT)

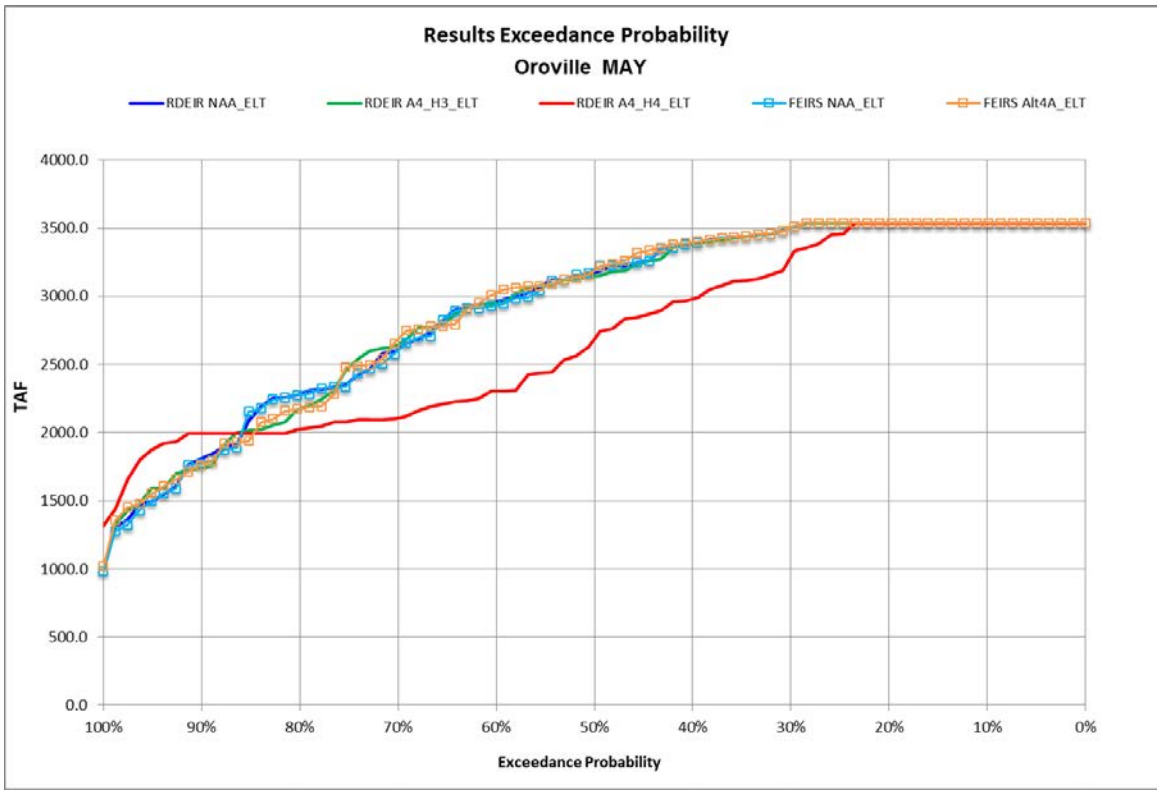

Figure 5F.4-7. Storage Exceedance Probability for Lake Oroville, End of May (Alt4A ELT)

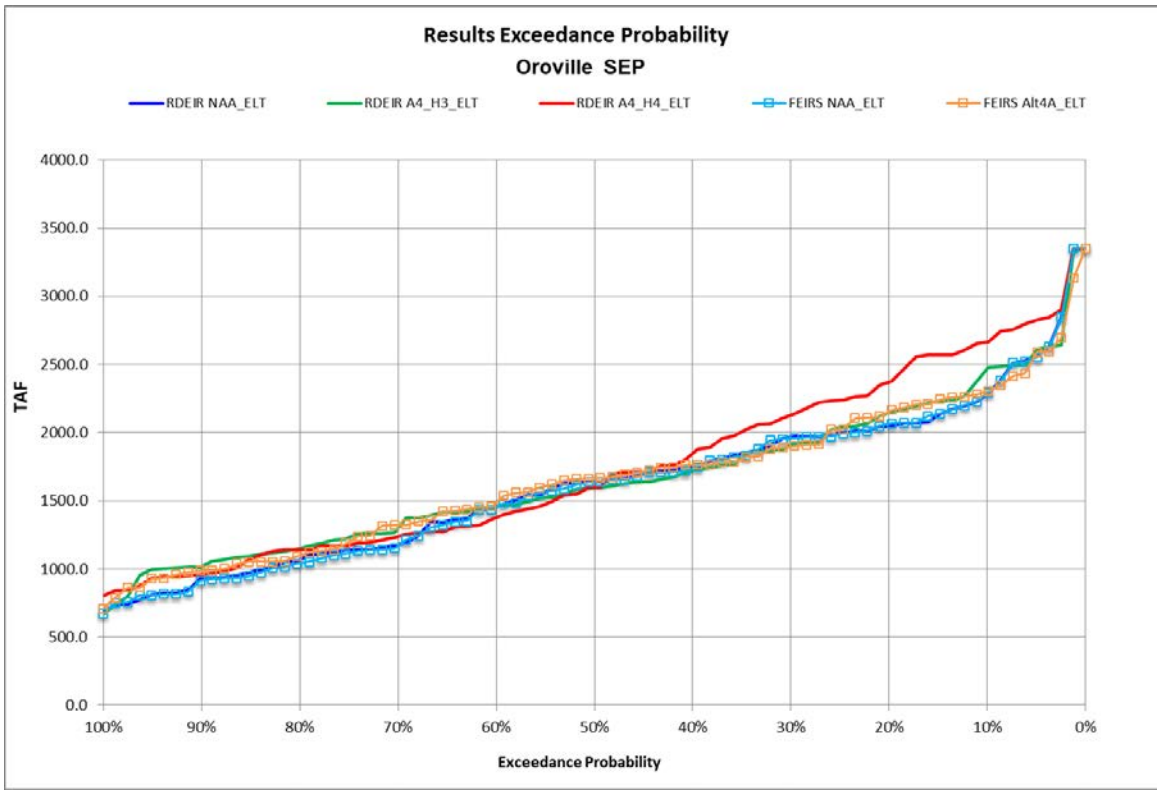

Figure 5F.4-8. Storage Exceedance Probability for Lake Oroville, End of September (Alt4A ELT)

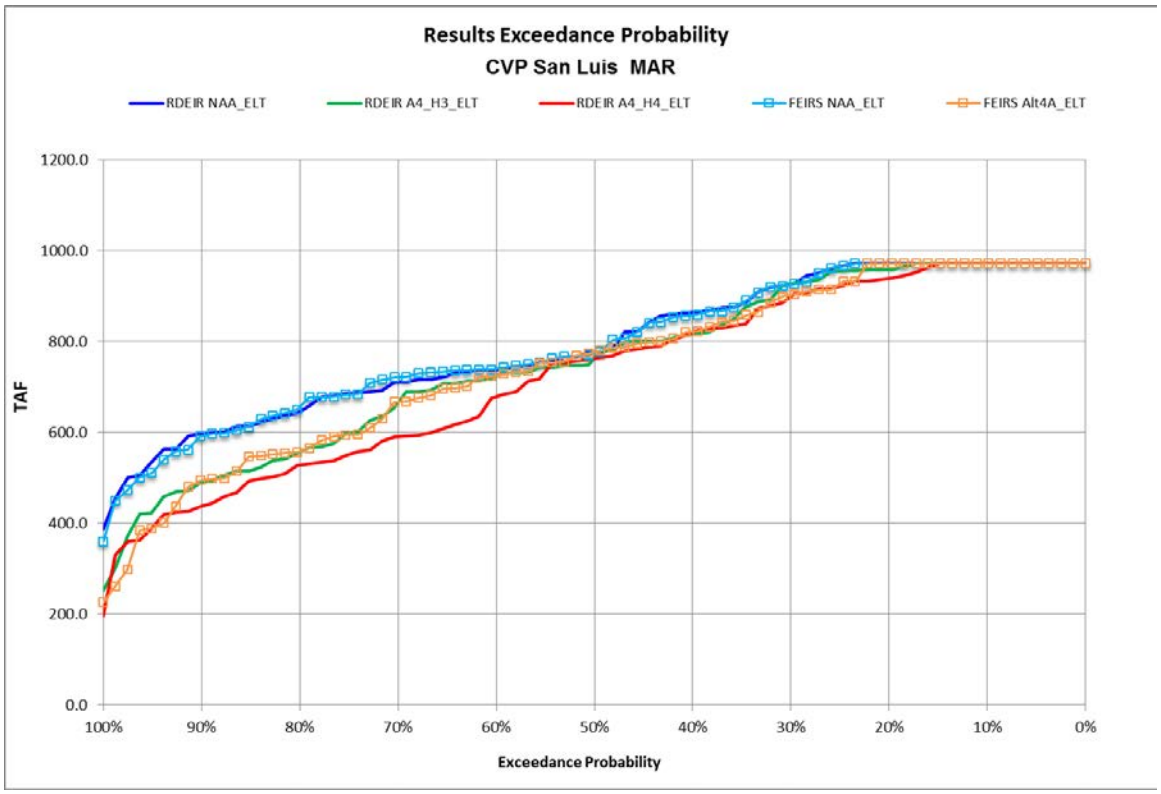

Figure 5F.4-9. Storage Exceedance Probability for CVP San Luis, End of March (Alt4A ELT)

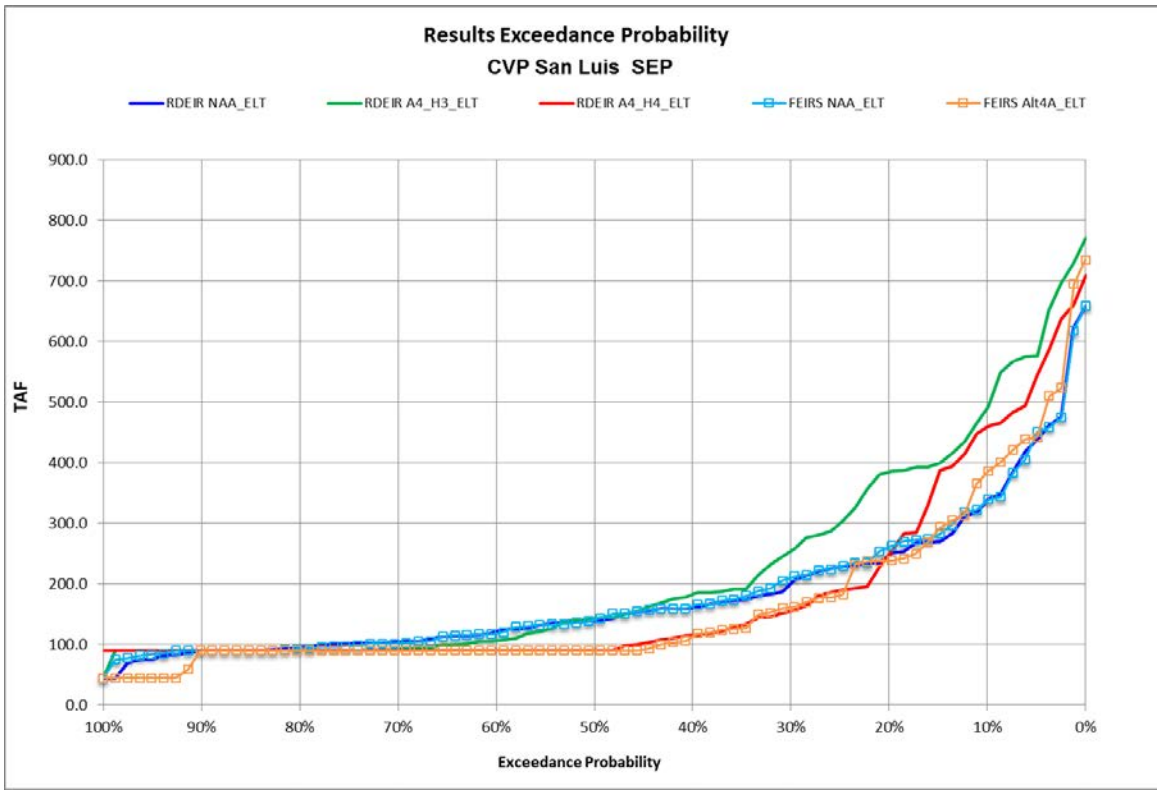

Figure 5F.4-10. Storage Exceedance Probability for CVP San Luis, End of September (Alt4A ELT)

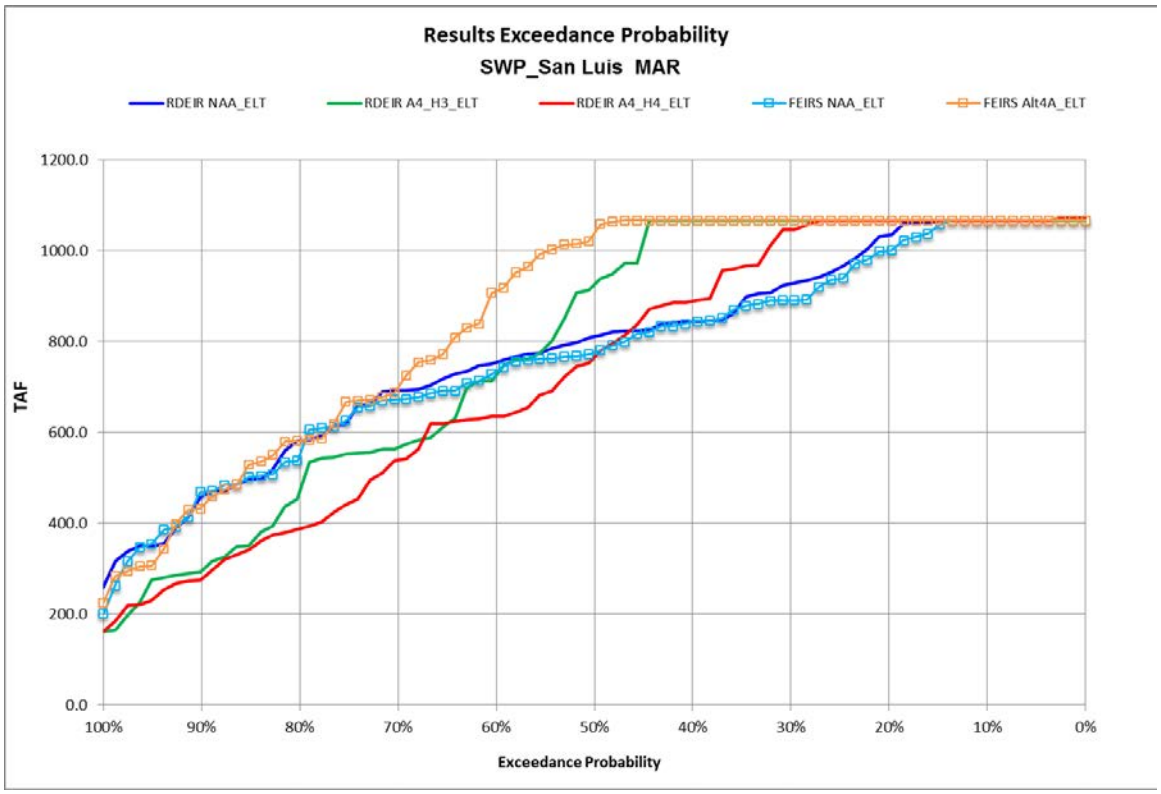

Figure 5F.4-11. Storage Exceedance Probability for SWP San Luis, End of March (Alt4A ELT)

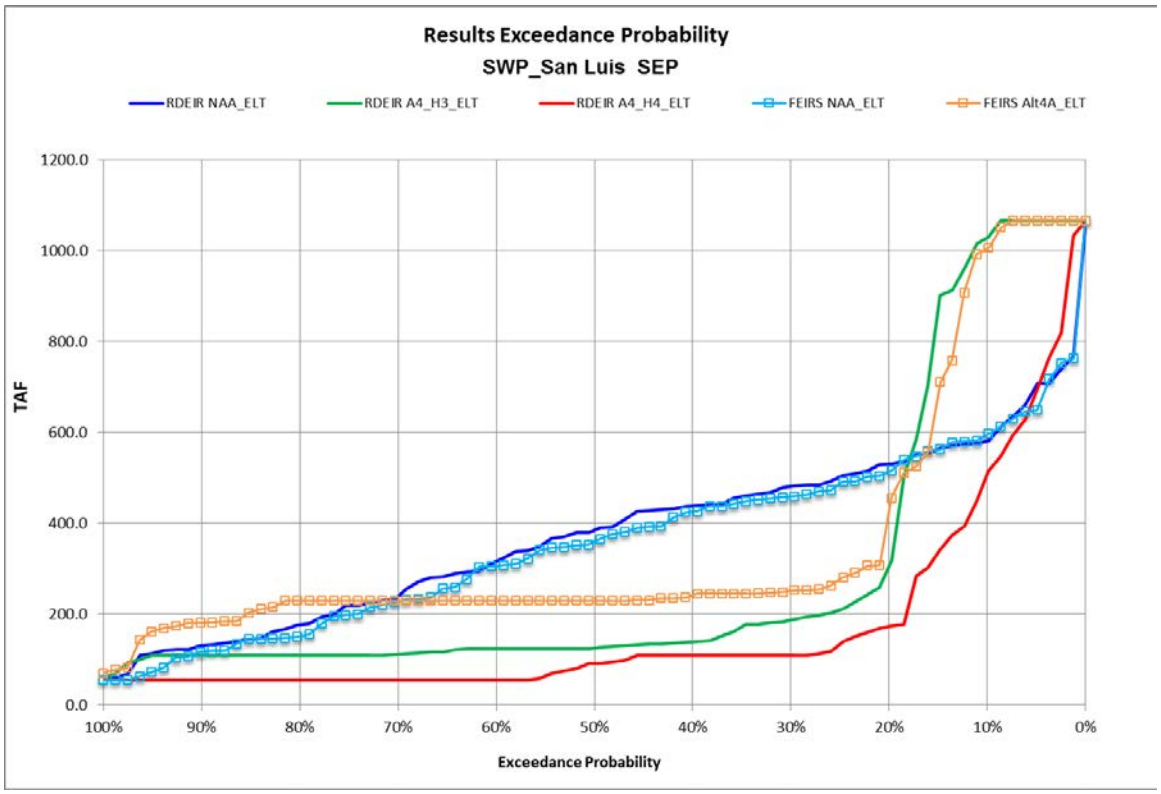

Figure 5F.4-12. Storage Exceedance Probability for SWP San Luis, End of September (Alt4A ELT)

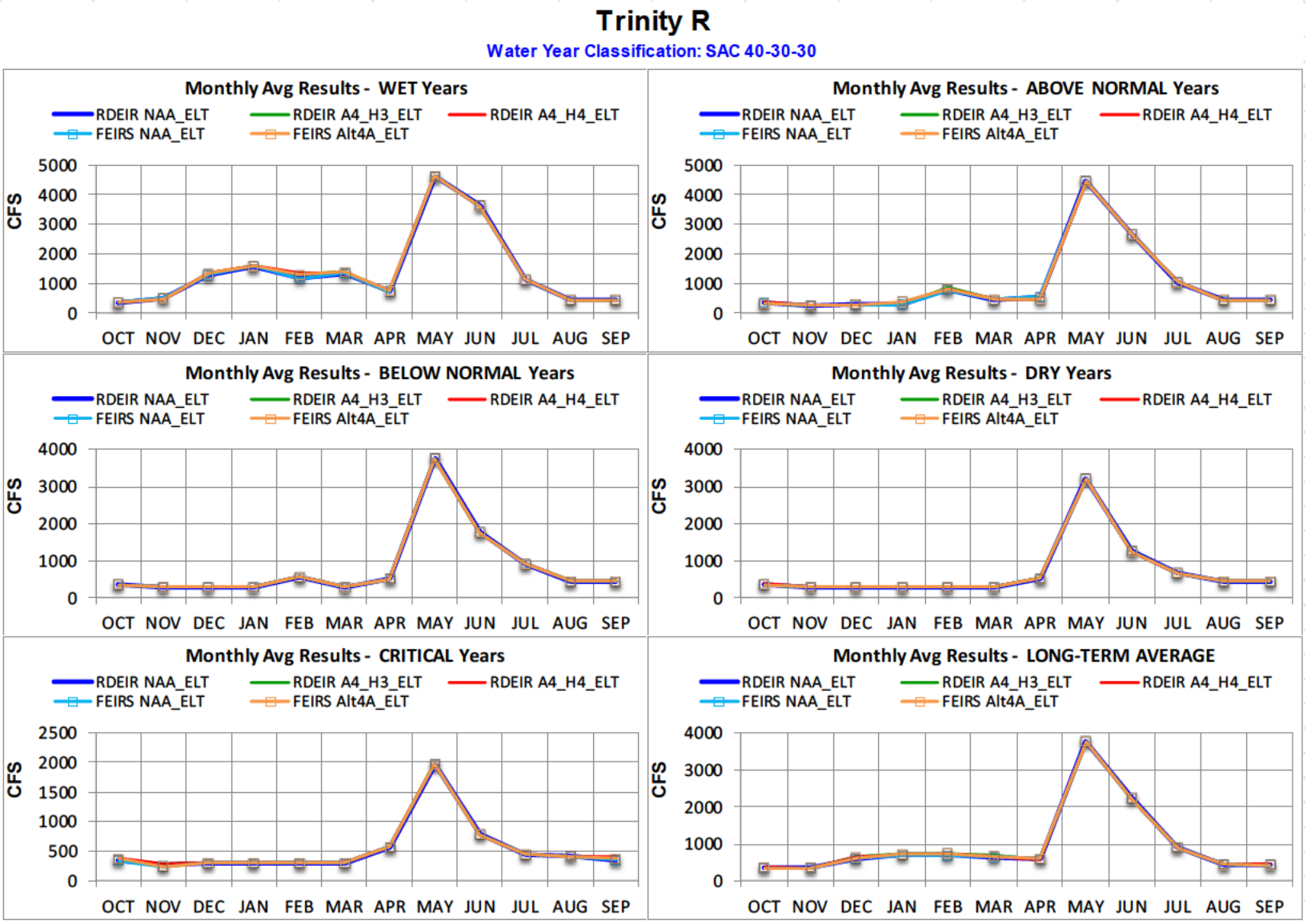

Figure 5F.4-13. Trinity River below Lewiston, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

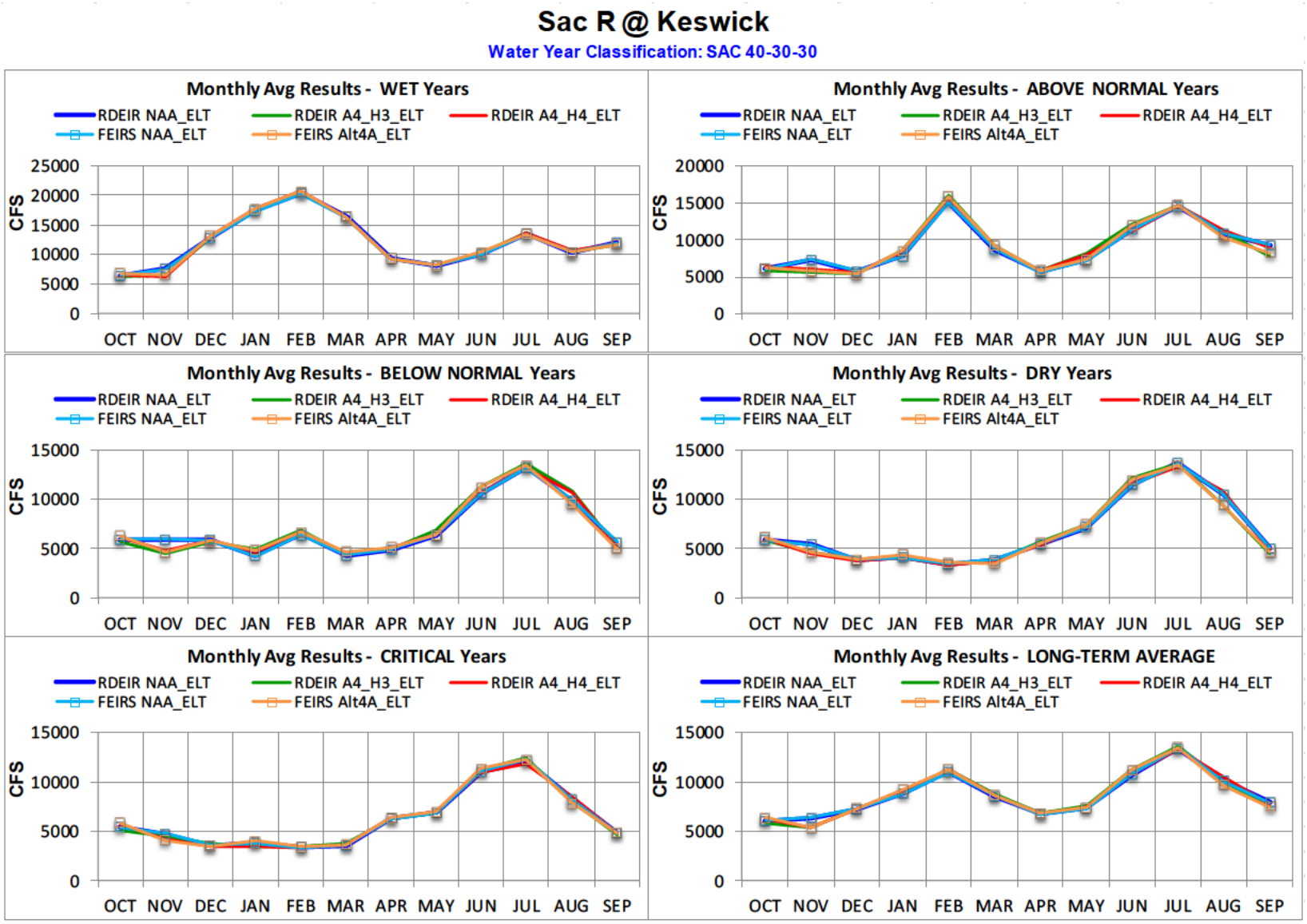

Figure 5F.4-14. Sacramento River below Keswick, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

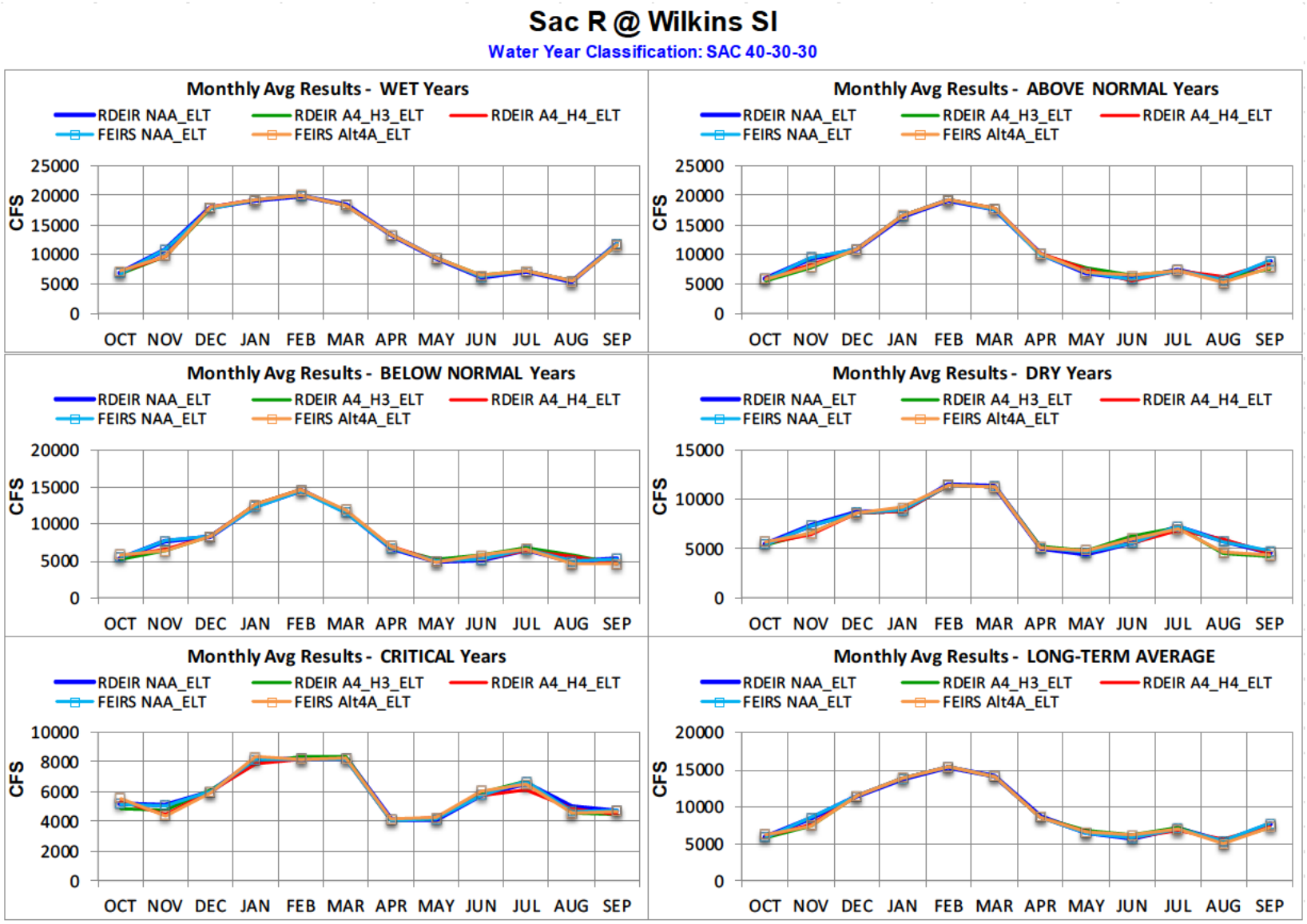

Figure 5F.4-15. Sacramento River at Wilkins Slough, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

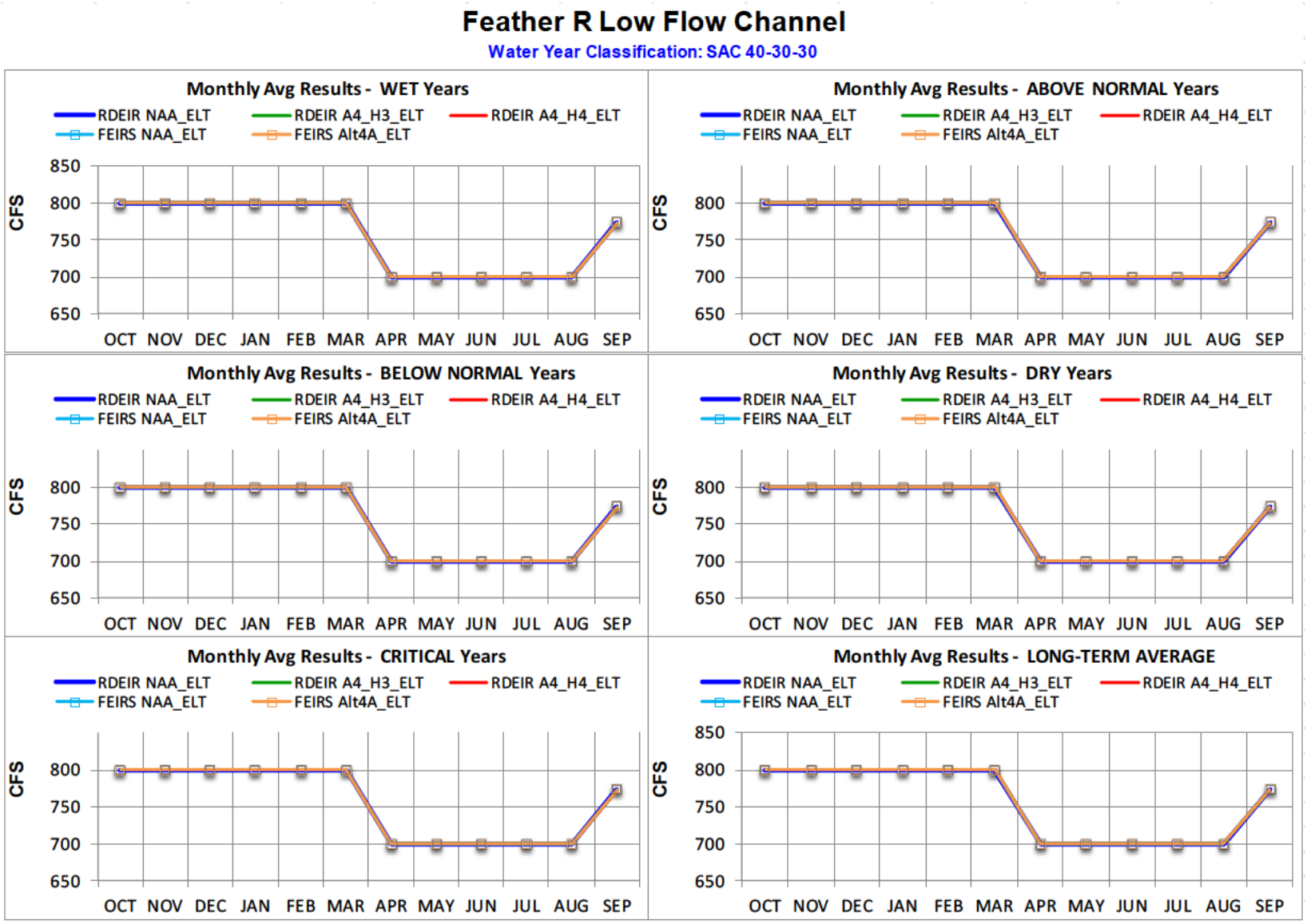

Figure 5F.4-16. Feather River Low Flow Channel, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

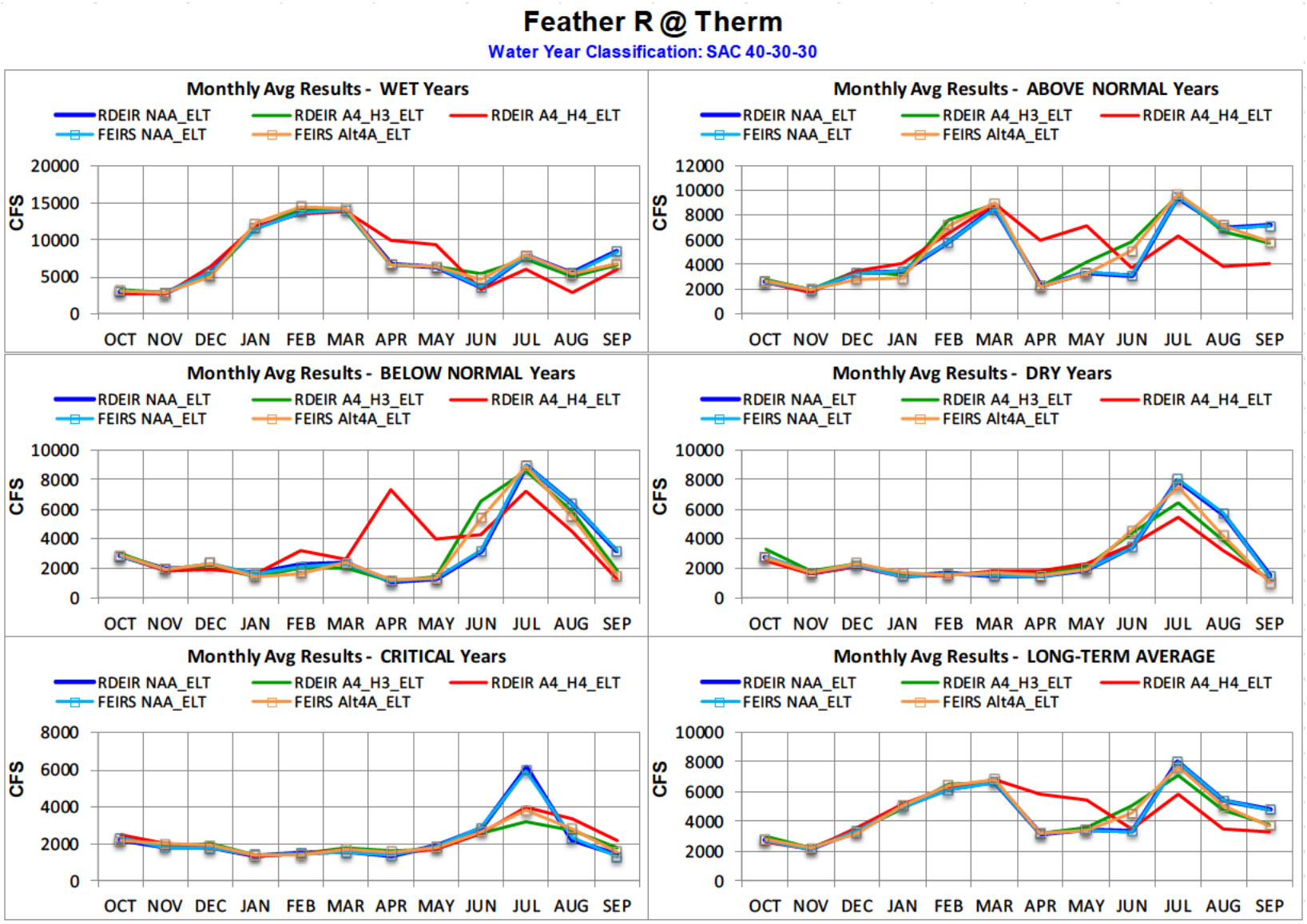

Figure 5F.4-17. Feather River below Thermalito, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

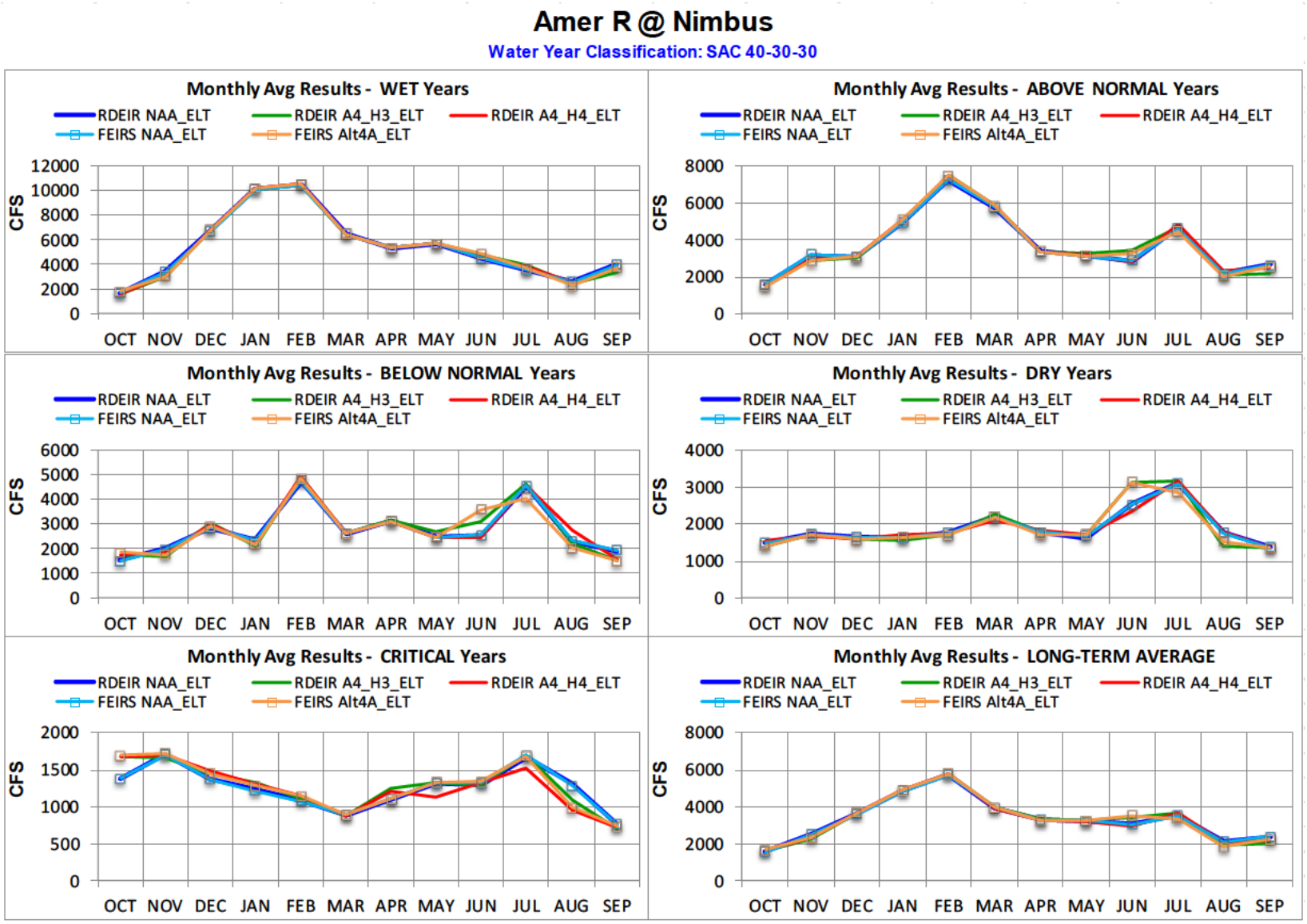

Figure 5F.4-18. American River below Nimbus, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

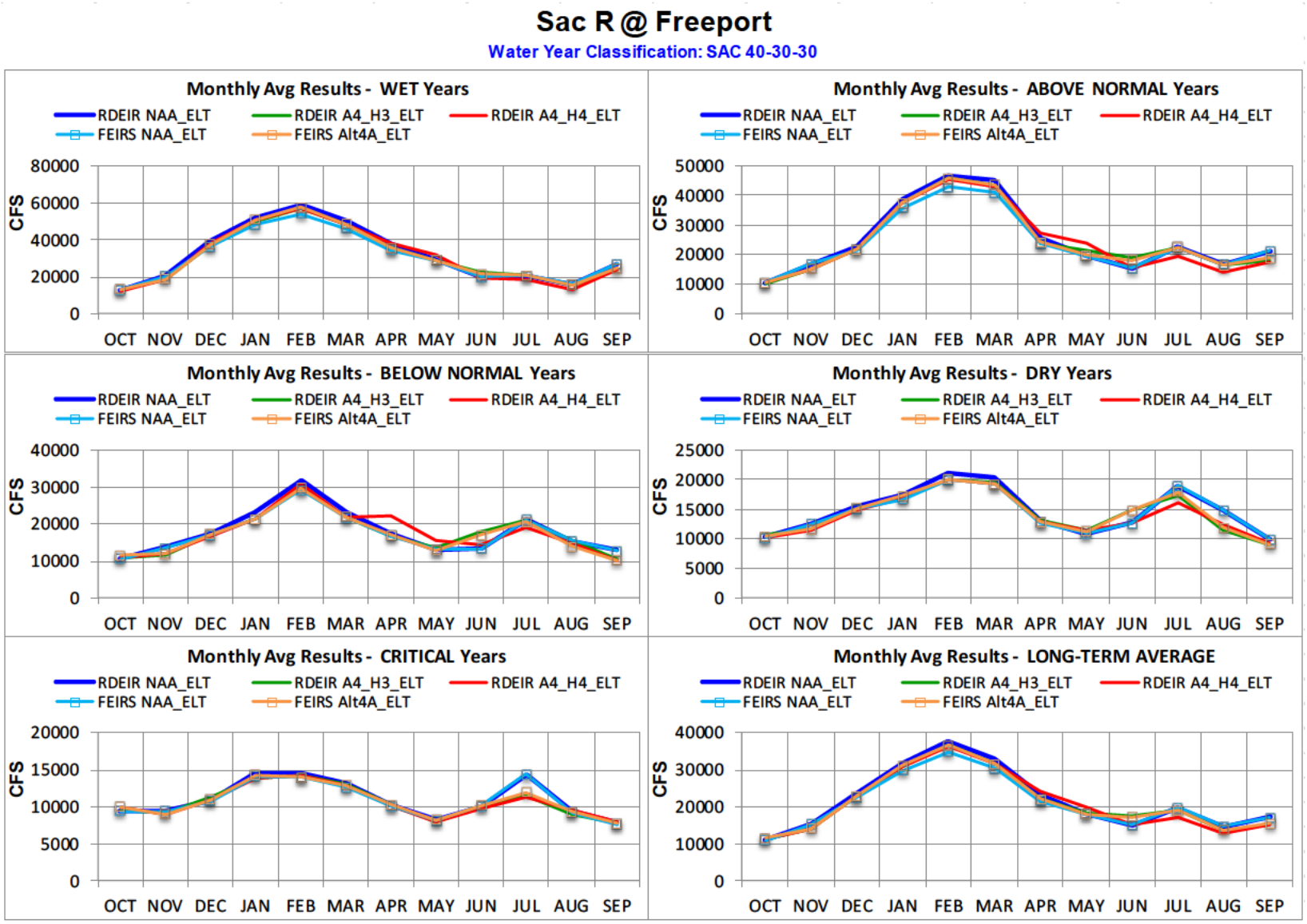

Figure 5F.4-19. Sacramento River at Freeport, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

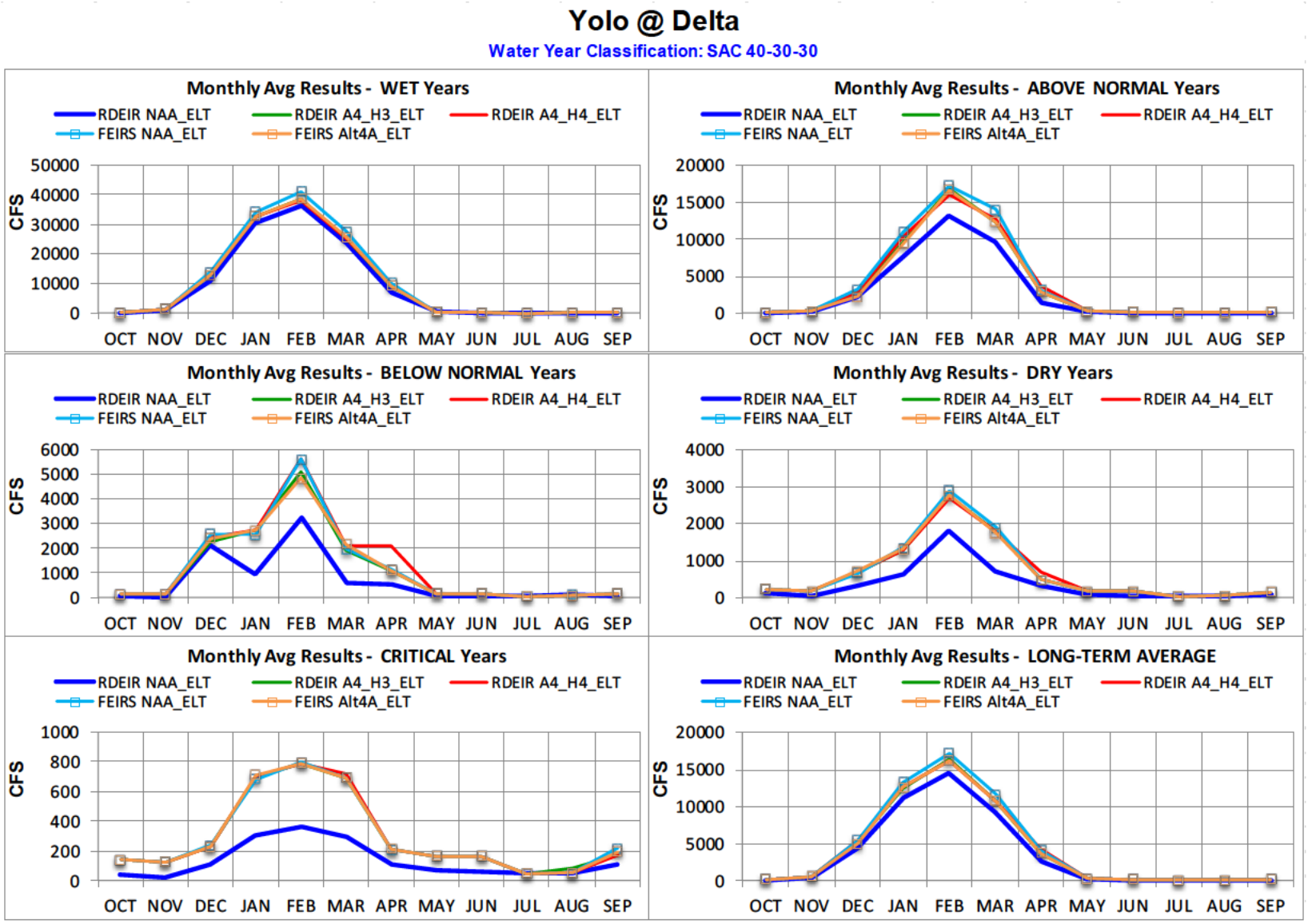

Figure 5F.4-20. Yolo Bypass at Delta, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

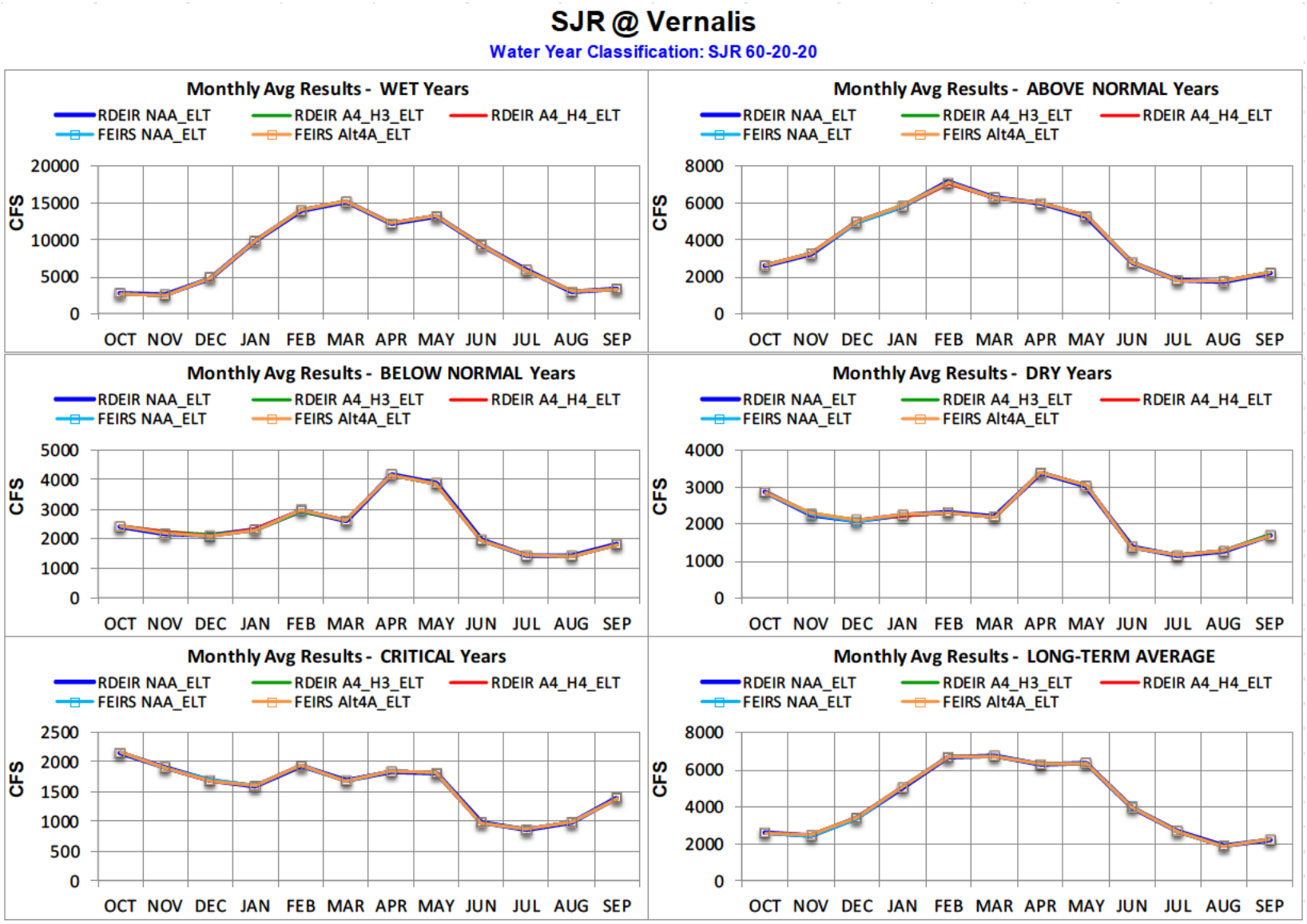

Figure 5F.4-21. San Joaquin River at Vernalis, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

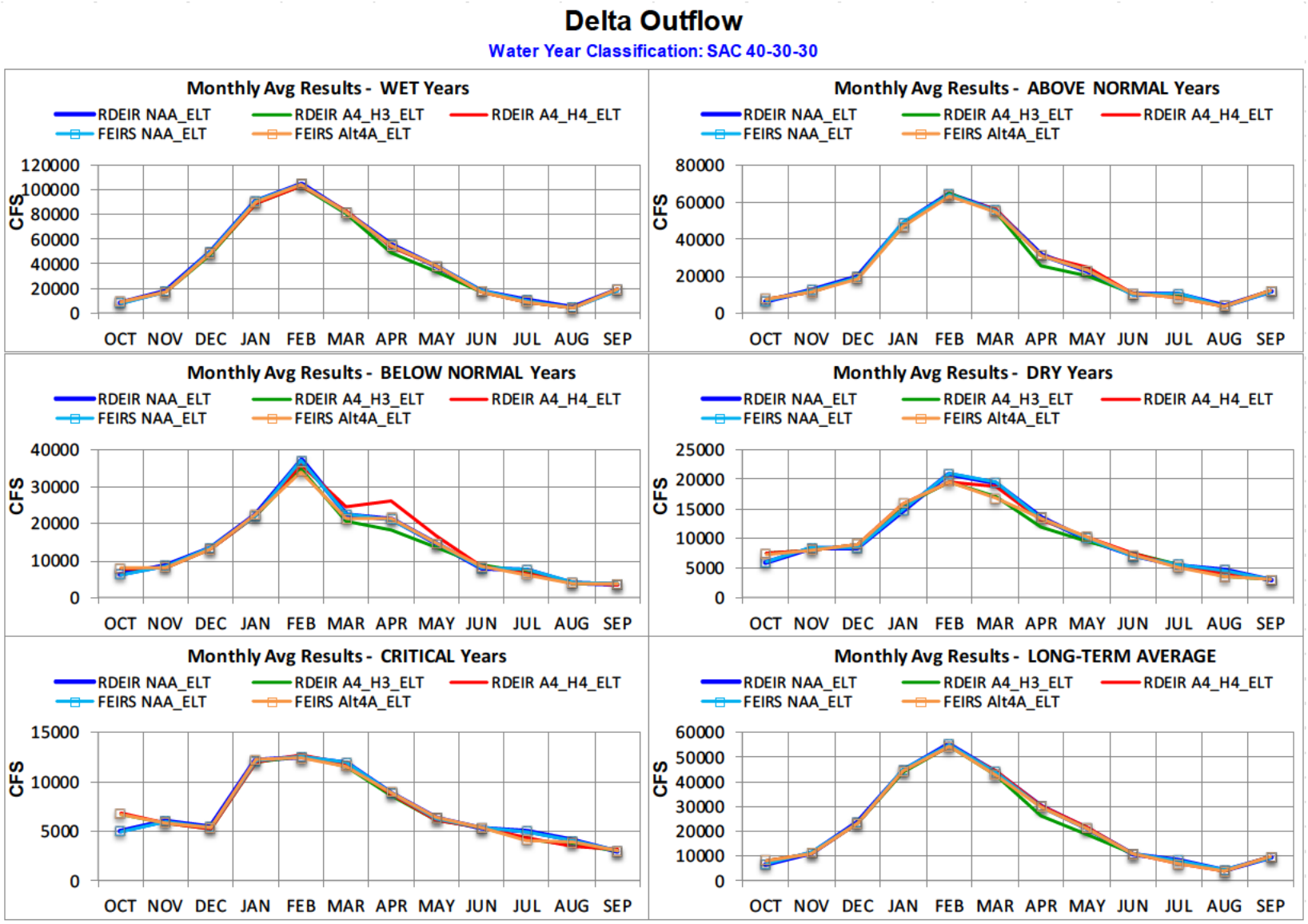

Figure 5F.4-22. Delta Outflow, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

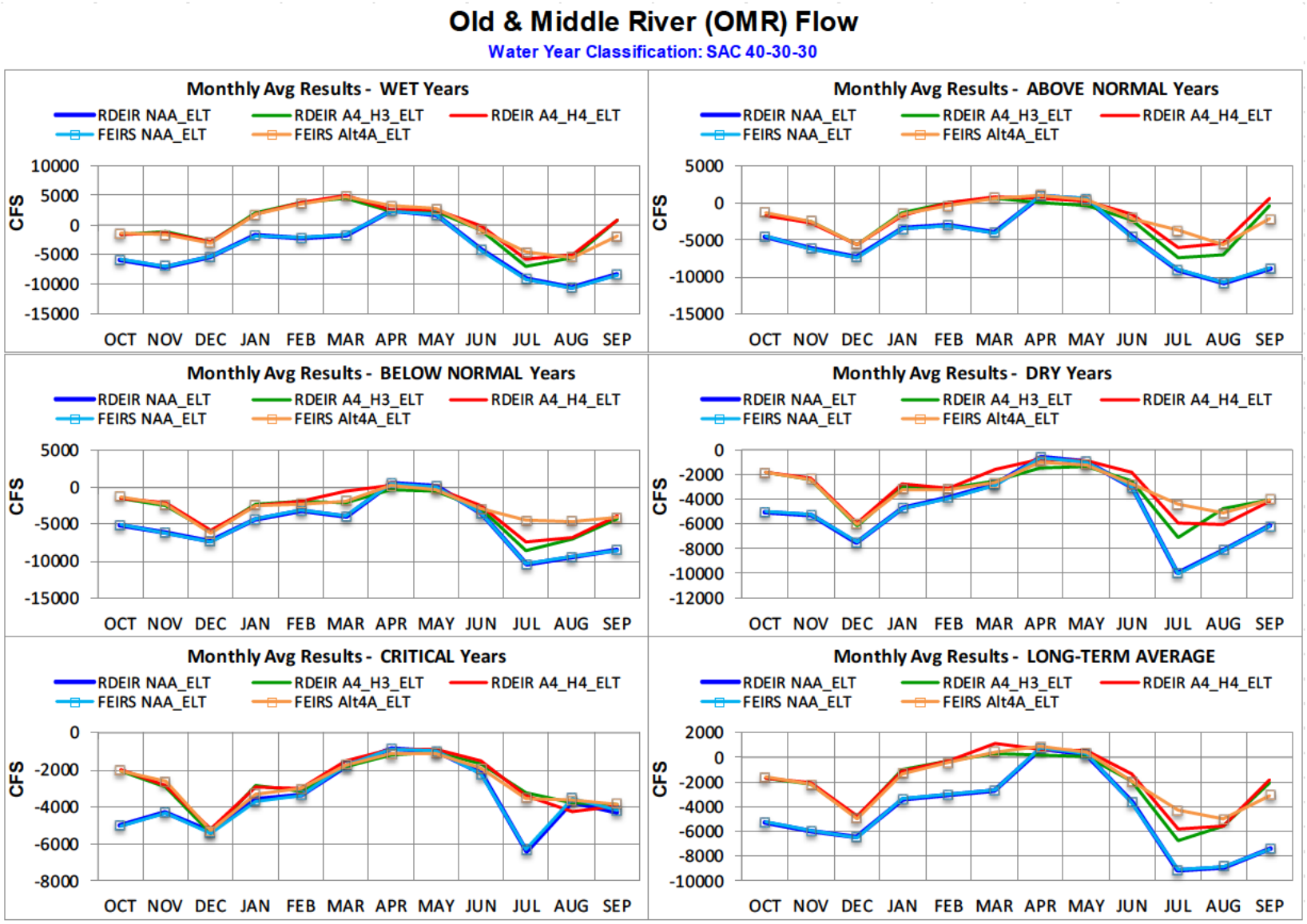

Figure 5F.4-23. Combined Old and Middle River Flow, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

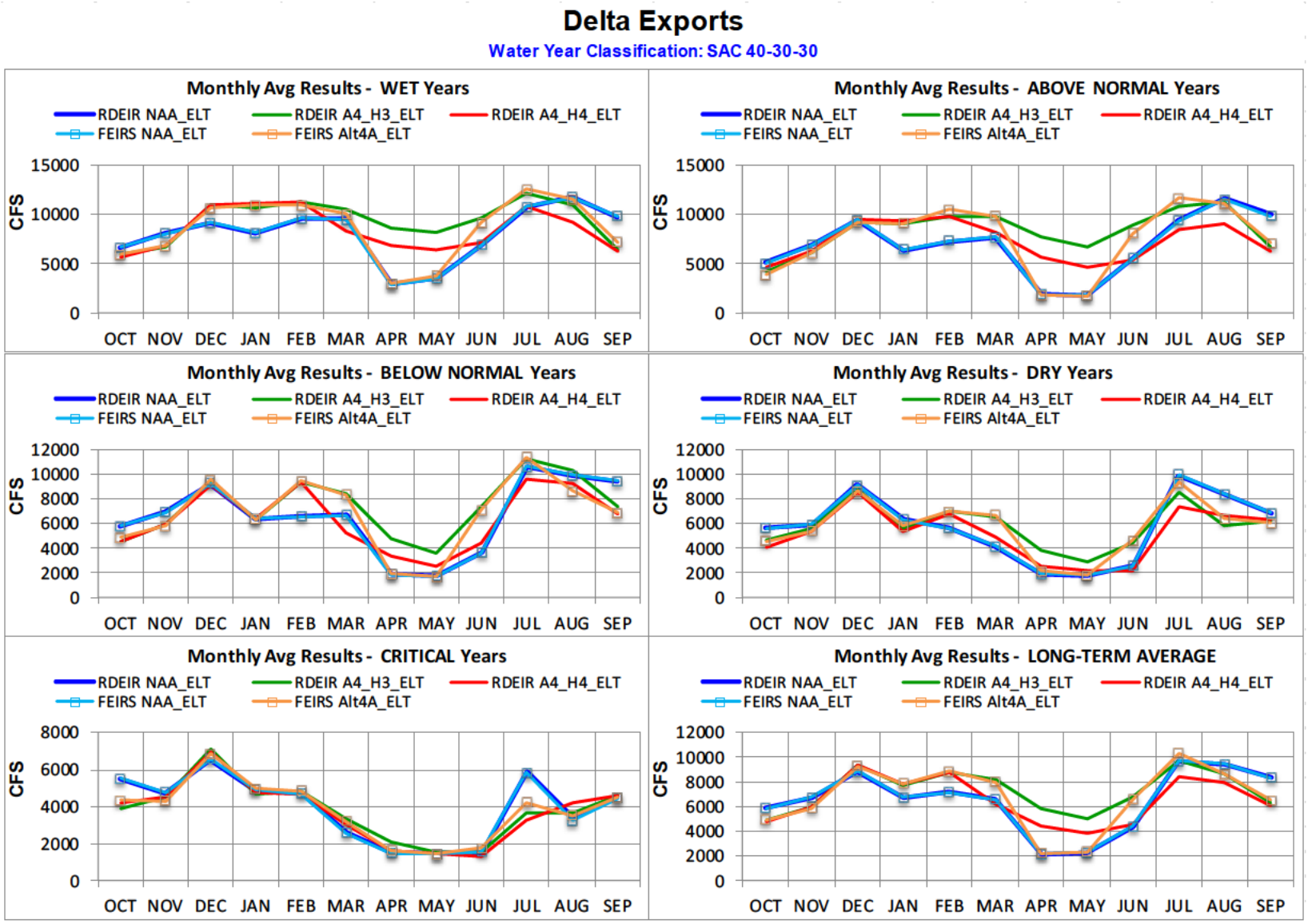

Figure 5F.4-24. Total Delta Exports, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

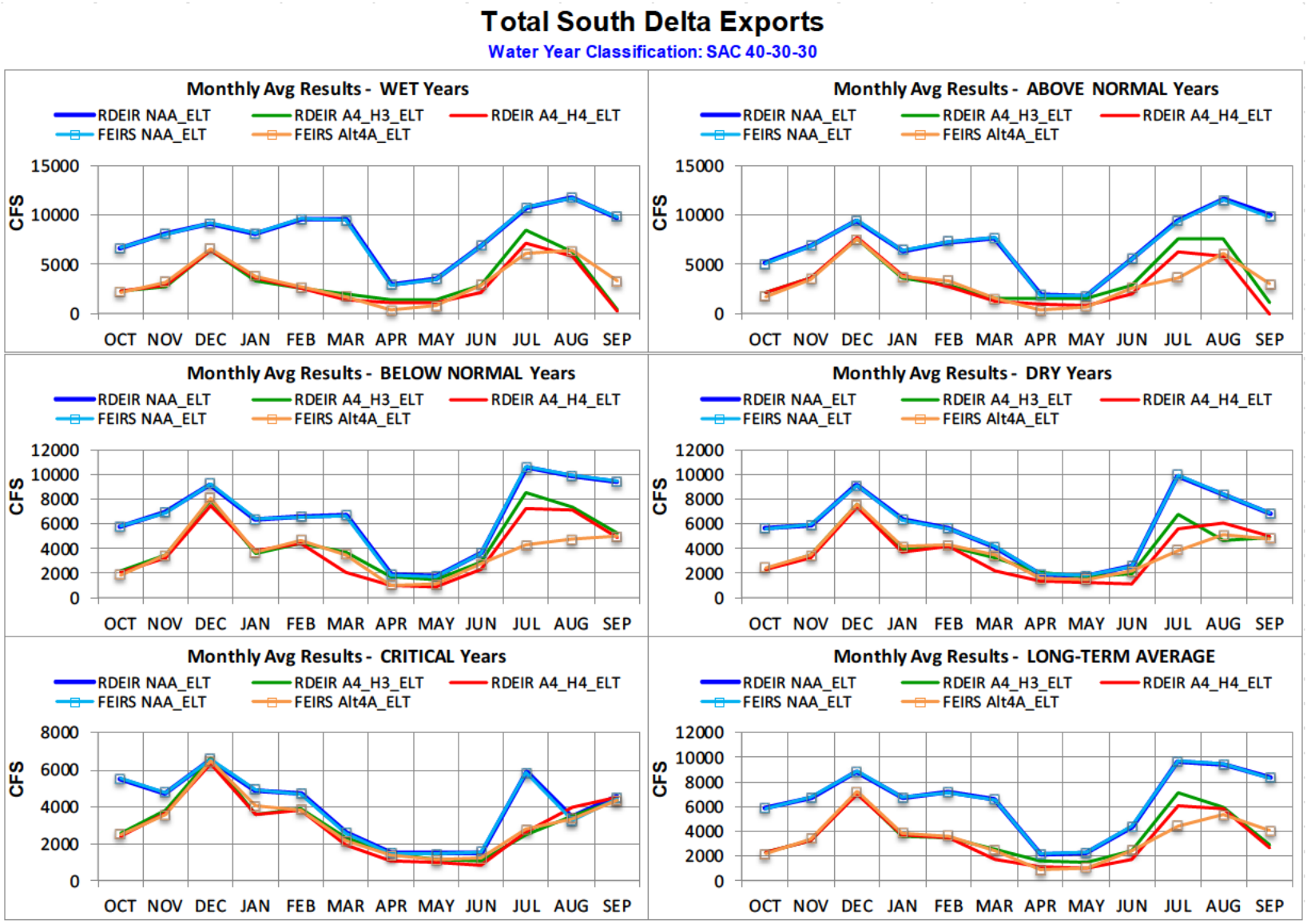

Figure 5F.4-25. Total South Delta Exports, Monthly Average Flow (Alt4A ELT) *[WYT based on current climate]*

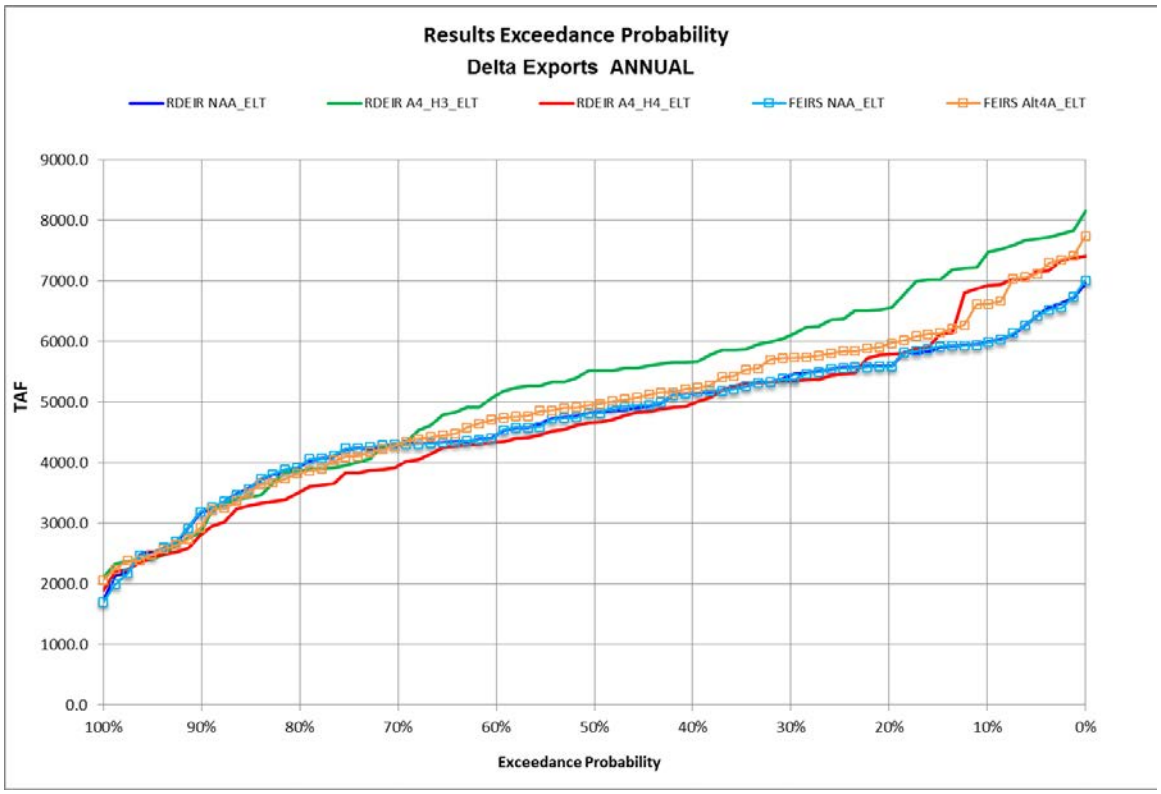

Figure 5F.4-26. Annual (Oct-Sep) Delta Exports Exceedance Probability (Alt4A ELT)

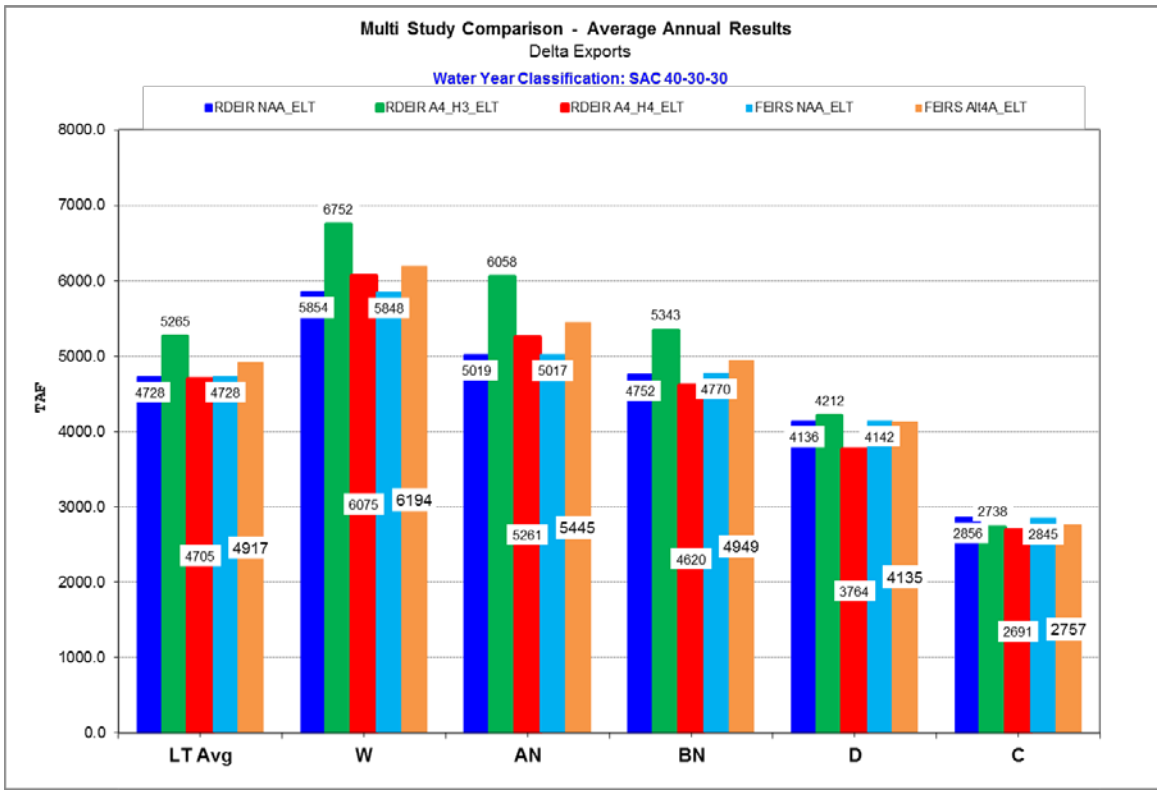

Figure 5F.4-27. Annual (Oct-Sep) Delta Exports by WYT (Alt4A ELT) *[WYT based on current climate]*

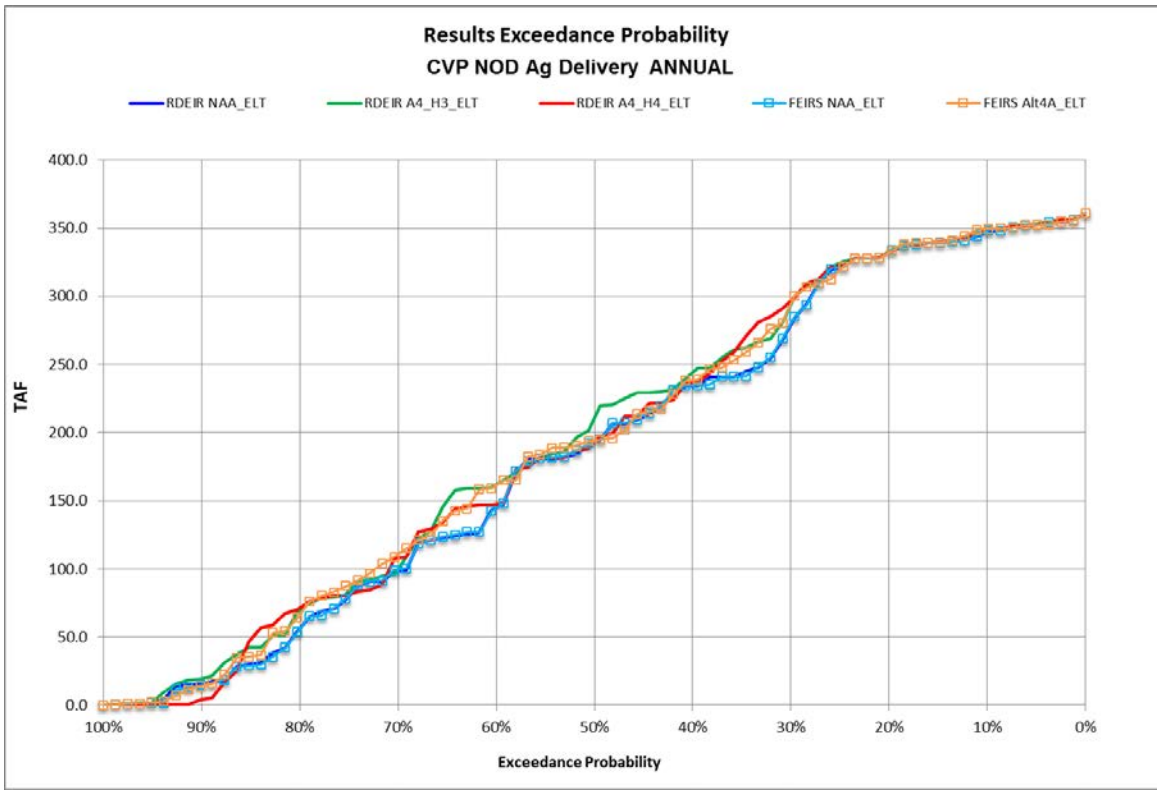

Figure 5F.4-28. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries Exceedance Probability (Alt4A ELT)

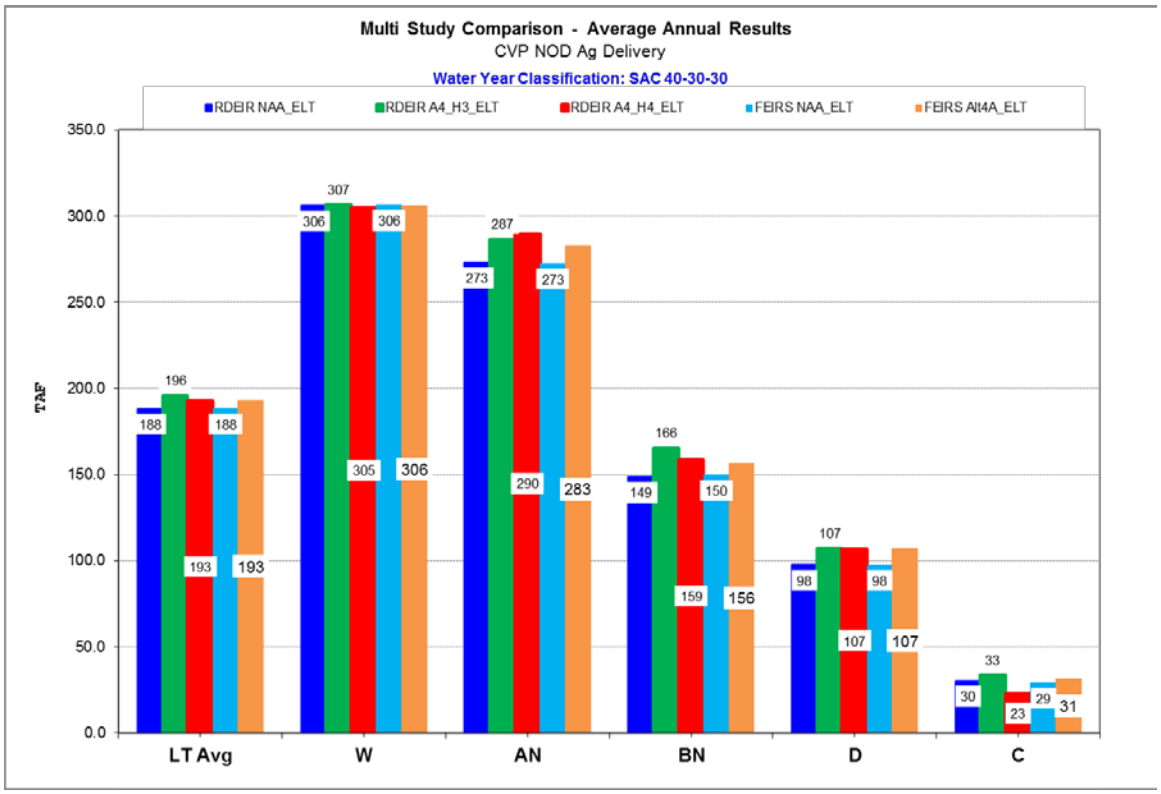

Figure 5F.4-29. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries by WYT (Alt4A ELT)
[WYT per current climate]

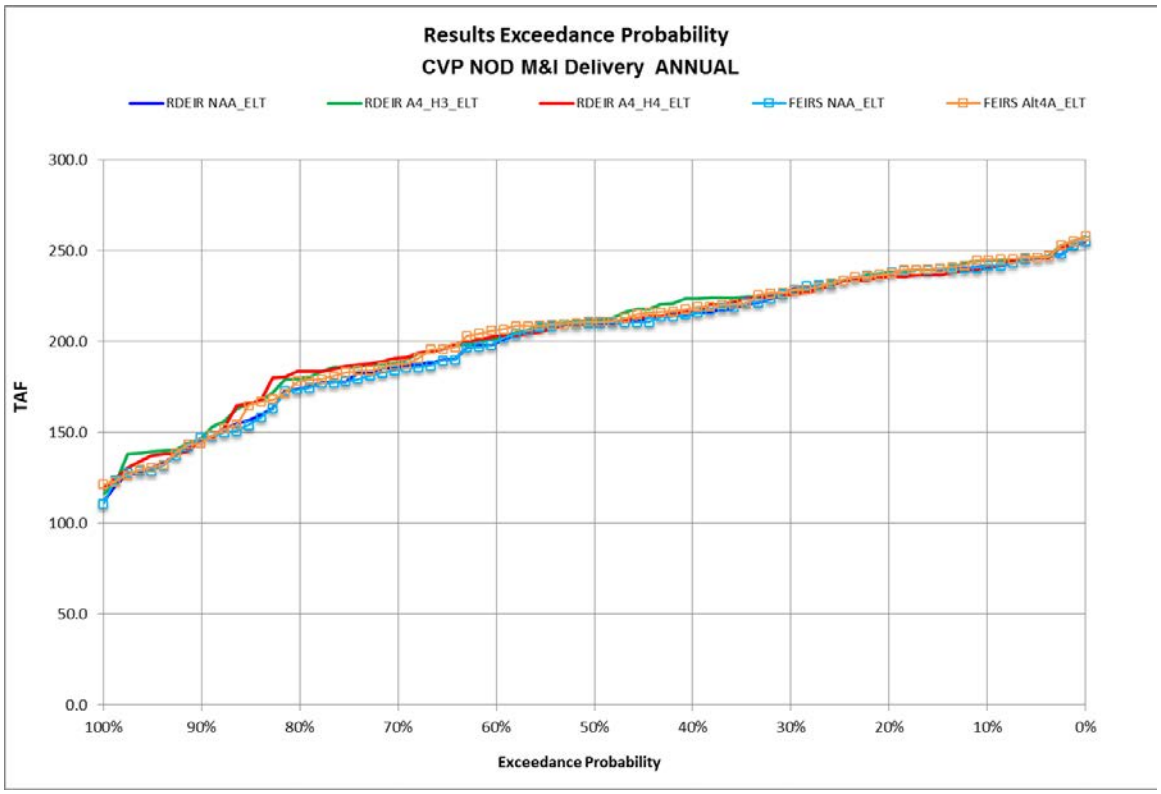

Figure 5F.4-30. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries Exceedance Probability (Alt4A ELT)

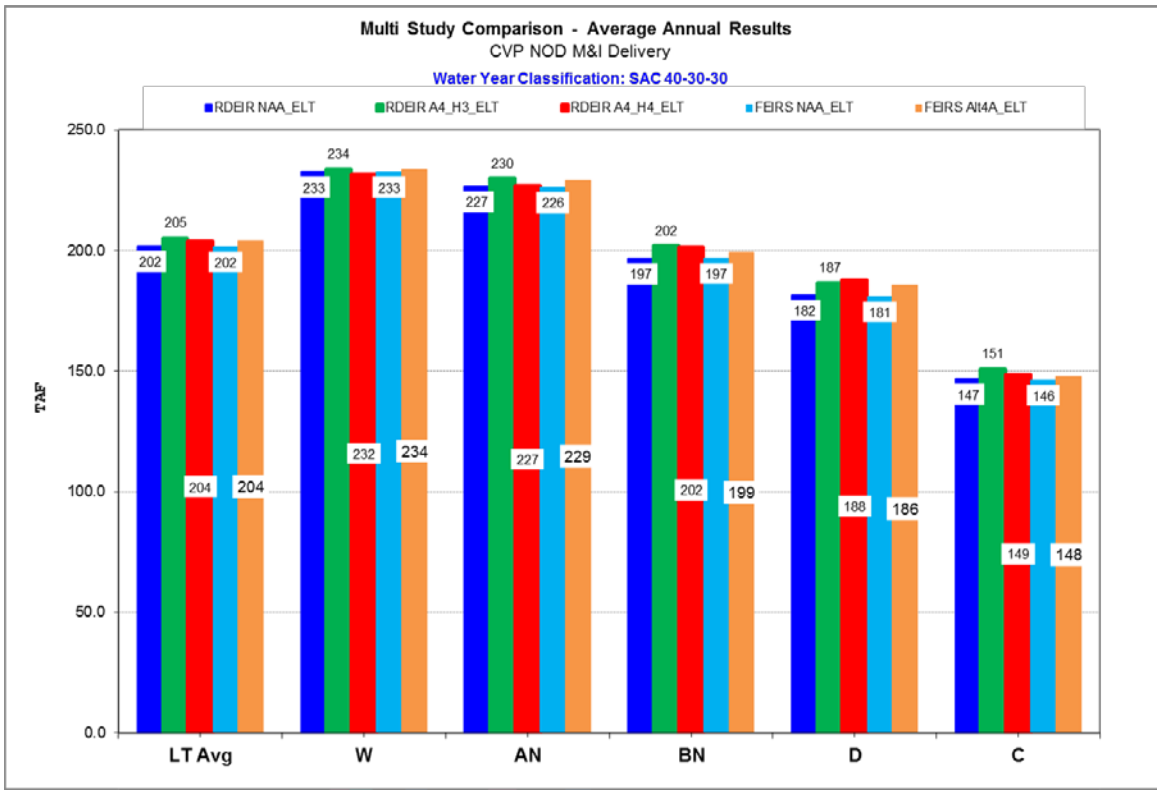

Figure 5F.4-31. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries (Alt4A ELT) *[WYT per current climate]*

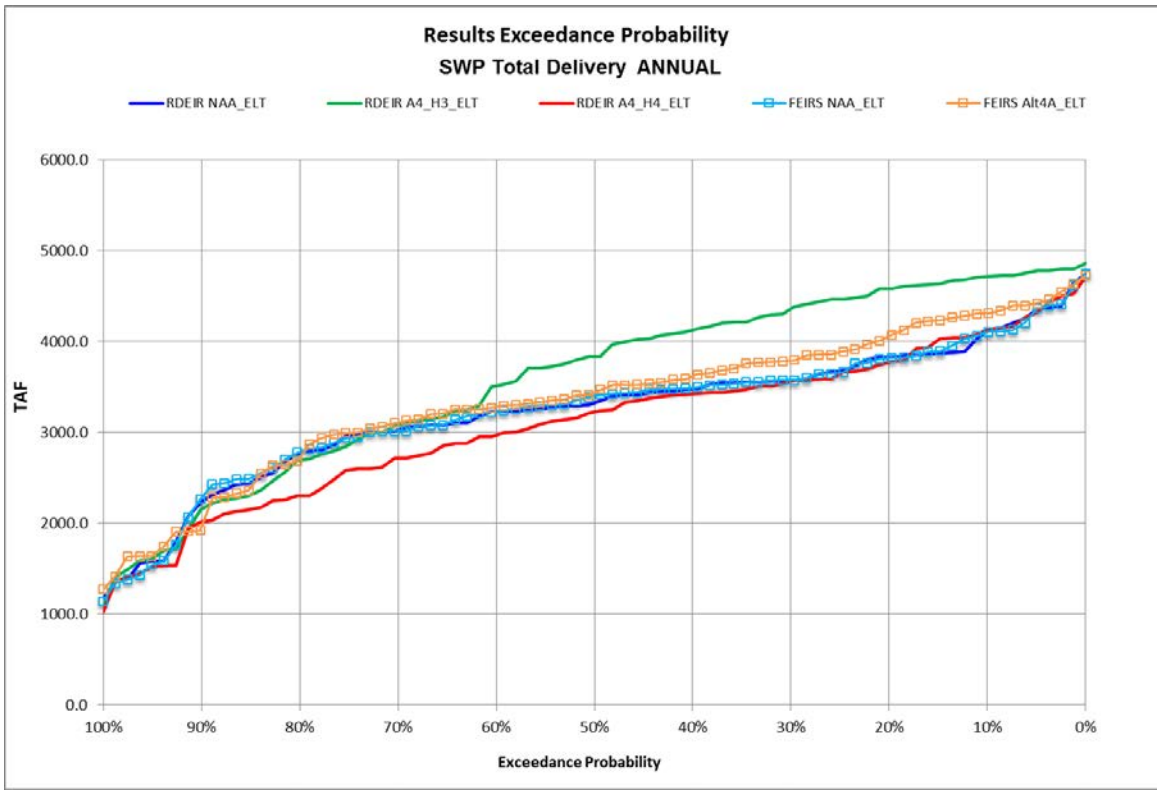

Figure 5F.4-32. Annual (Oct-Sep) SWP Total Deliveries Exceedance Probability (Alt4A ELT)

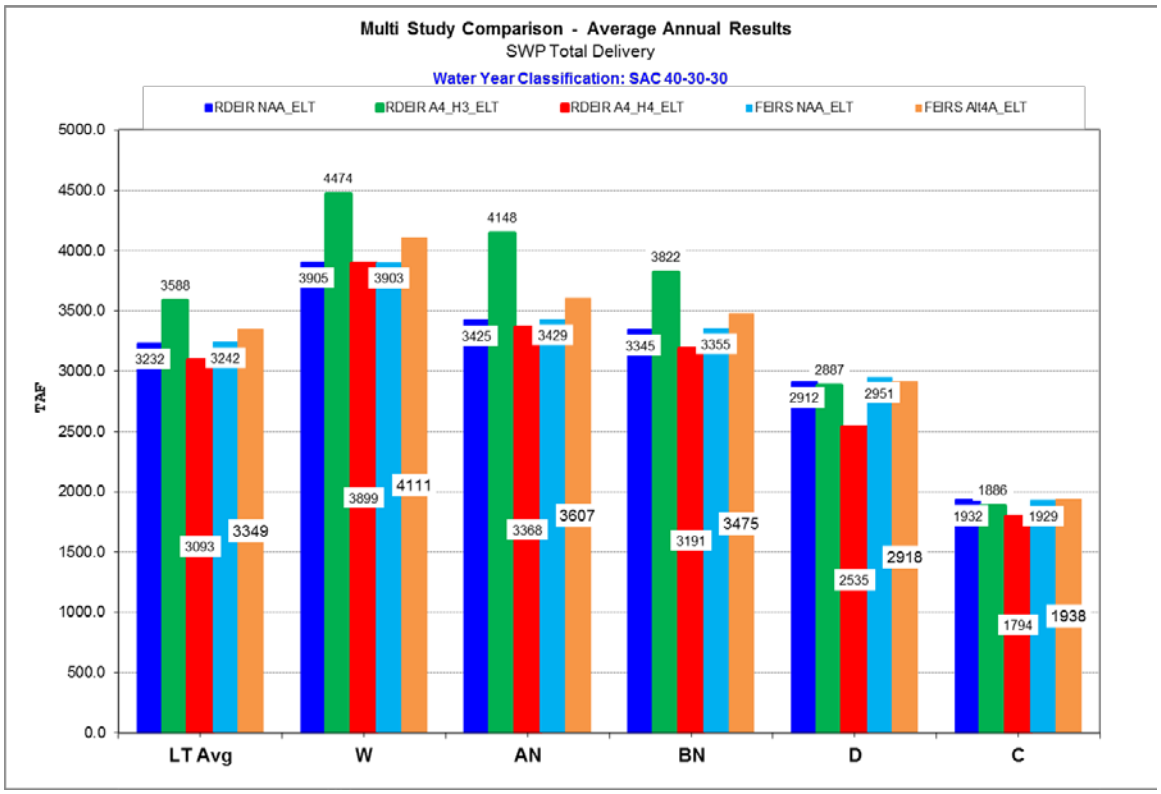

Figure 5F.4-33. Annual (Oct-Sep) SWP Total Deliveries (Alt4A ELT) by WYT *[WYT per current climate]*

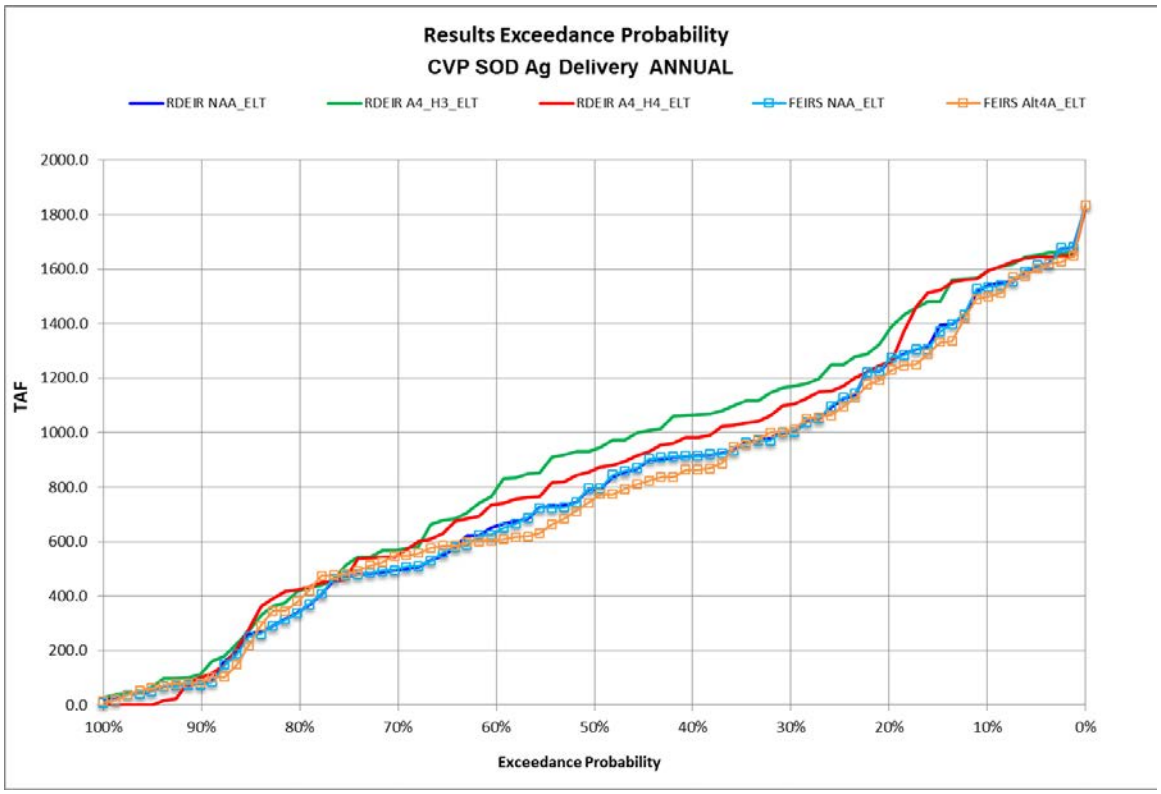

Figure 5F.4-34. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries Exceedance Probability (Alt4A ELT)

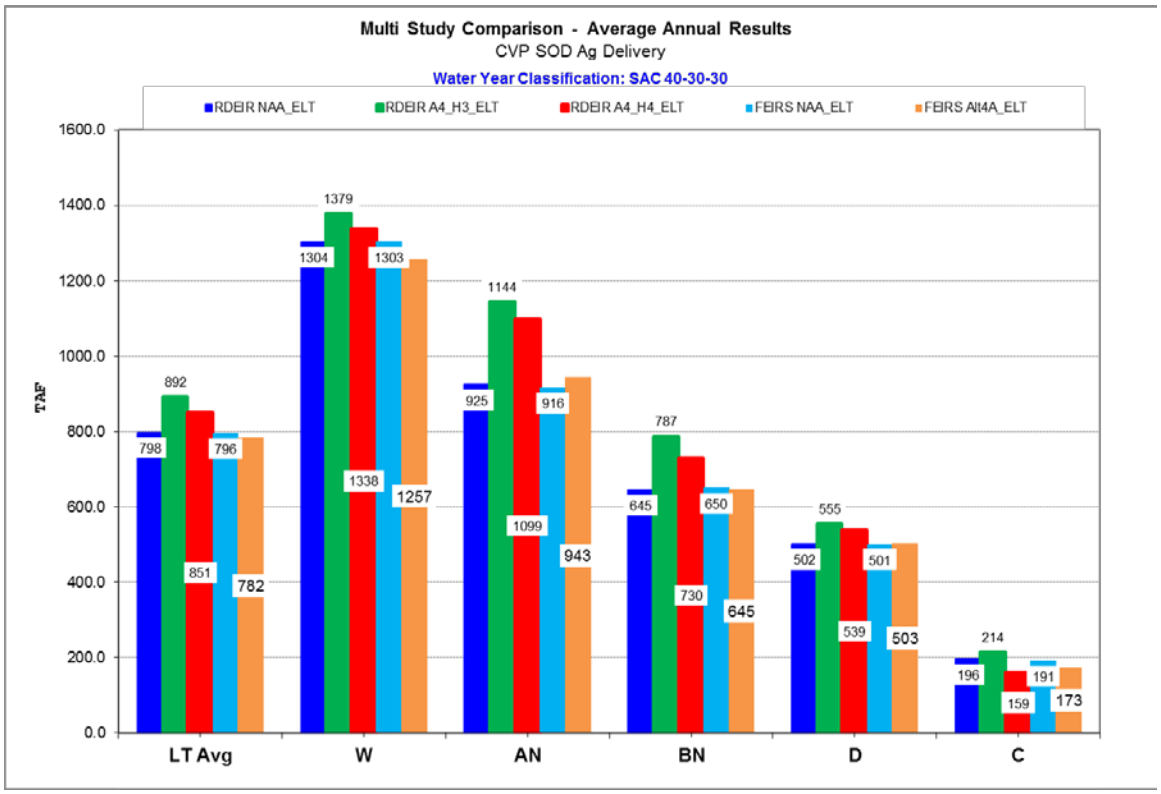

Figure 5F.4-35. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries by WYT (Alt4A ELT)
[WYT per current climate]

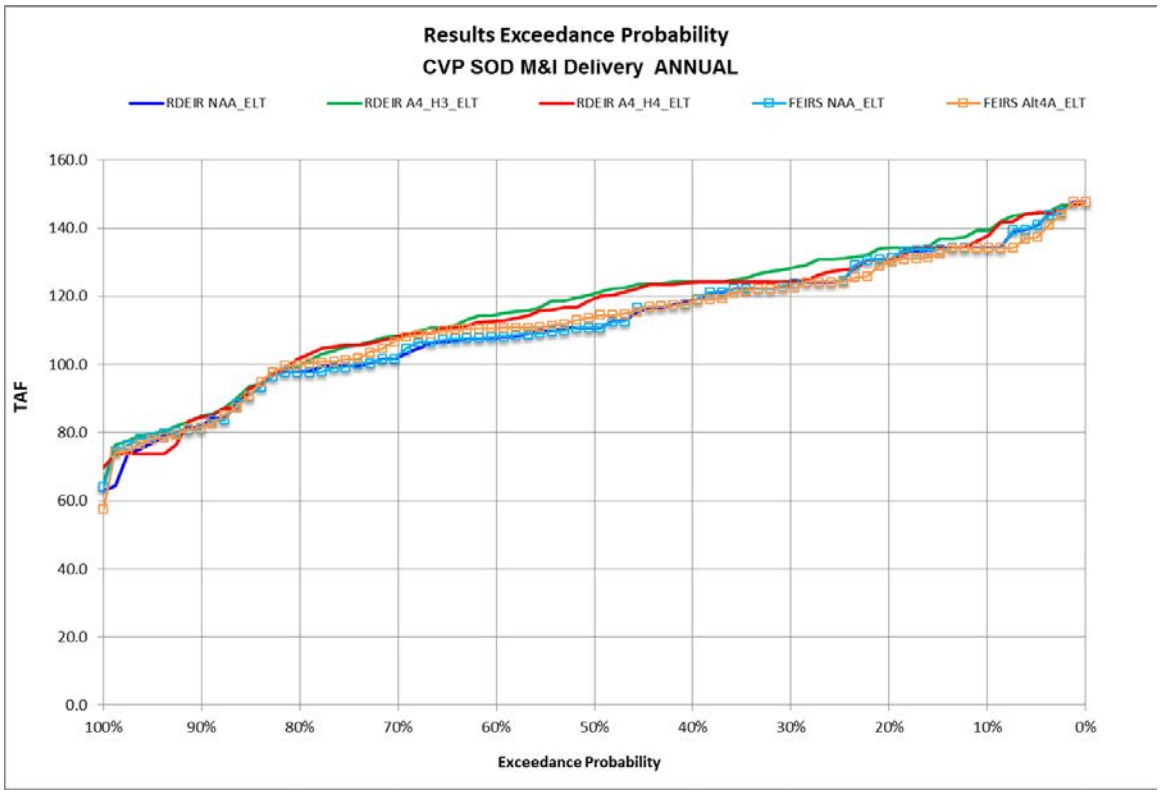

Figure 5F.4-36. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries Exceedance Probability (Alt4A ELT)

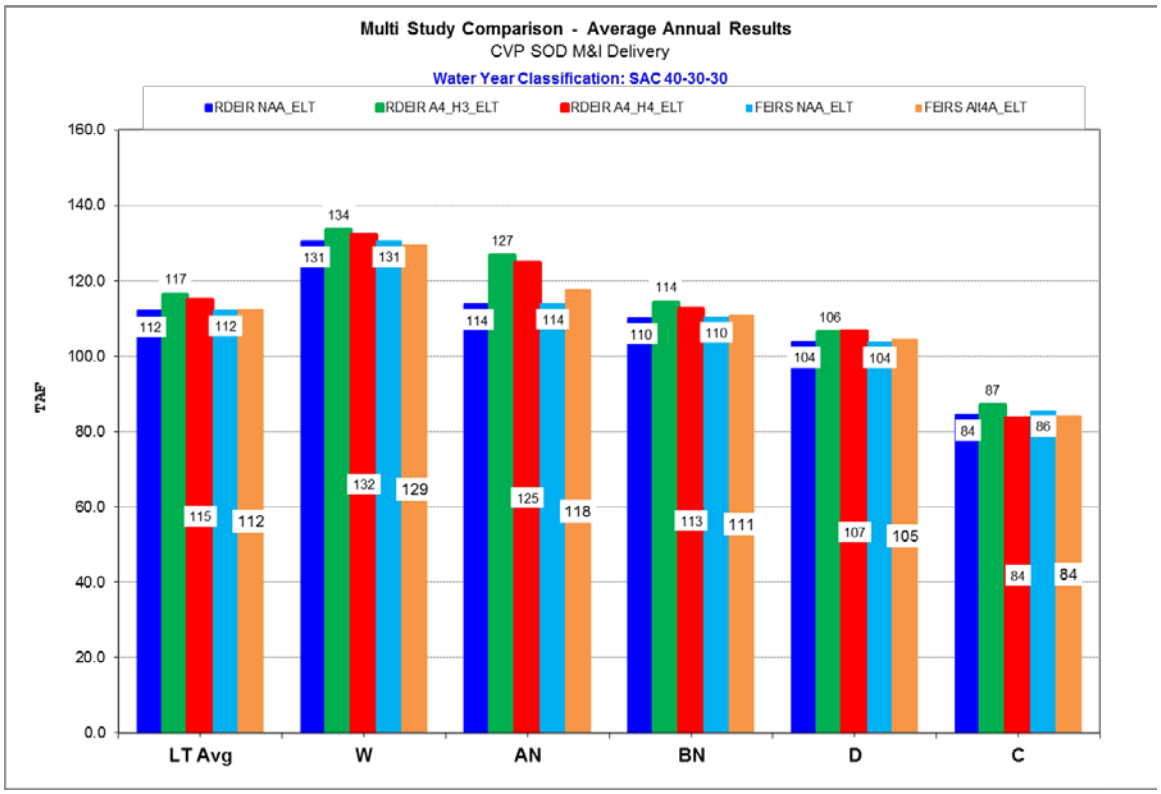

Figure 5F.4-37. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries (Alt4A ELT) *[WYT per current climate]*

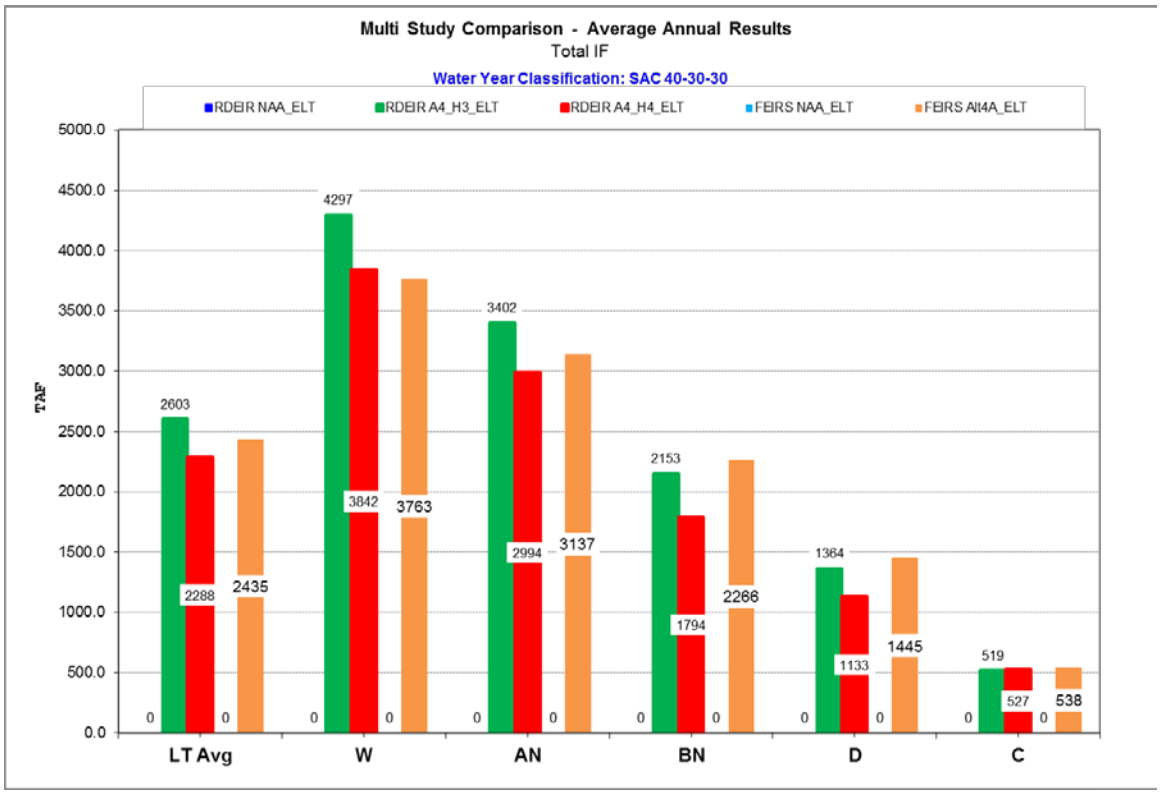

Figure 5F.4-38. Annual (Oct-Sep) Diversion at North Delta Intakes by WYT (Alt4A ELT) ***[WYT per current climate]***

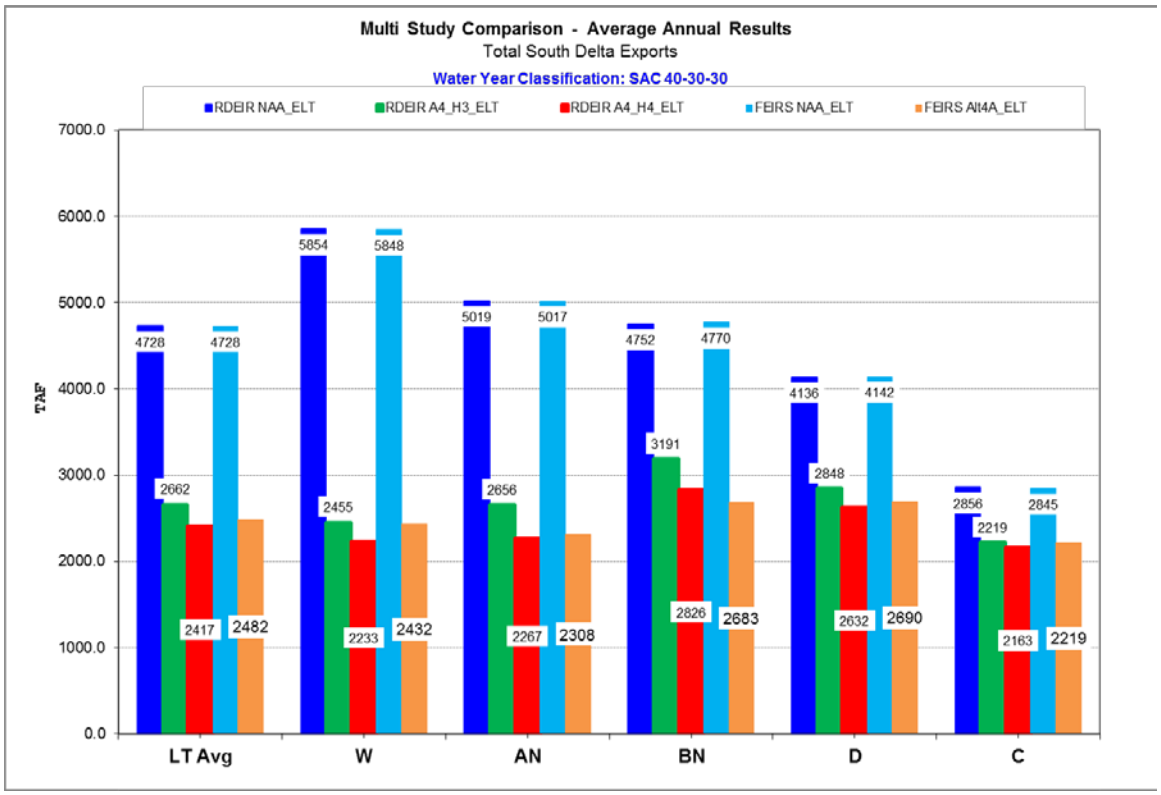

Figure 5F.4-39. Annual (Oct-Sep) Exports at South Delta Intakes by WYT (Alt4A ELT) ***[WYT per current climate]***

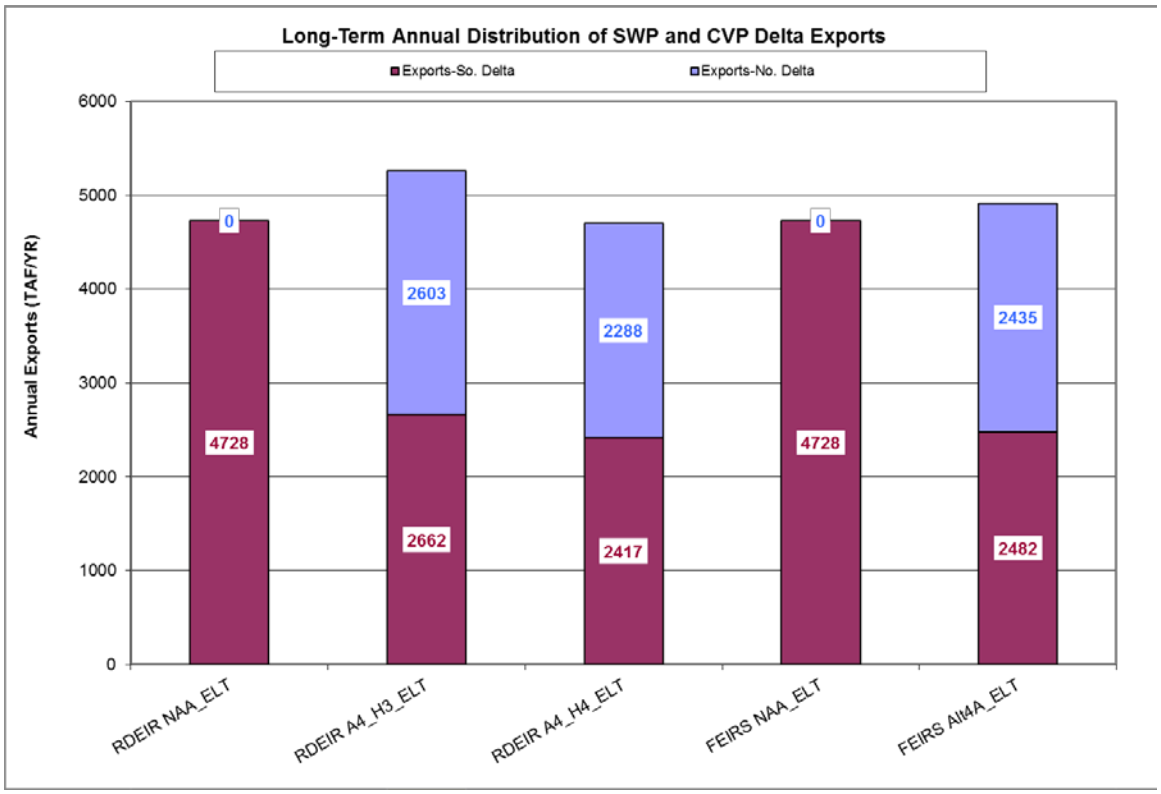

Figure 5F.4-40. Long-term Annual Distribution of Delta Exports at North and South Delta Intakes (Alt4A ELT).

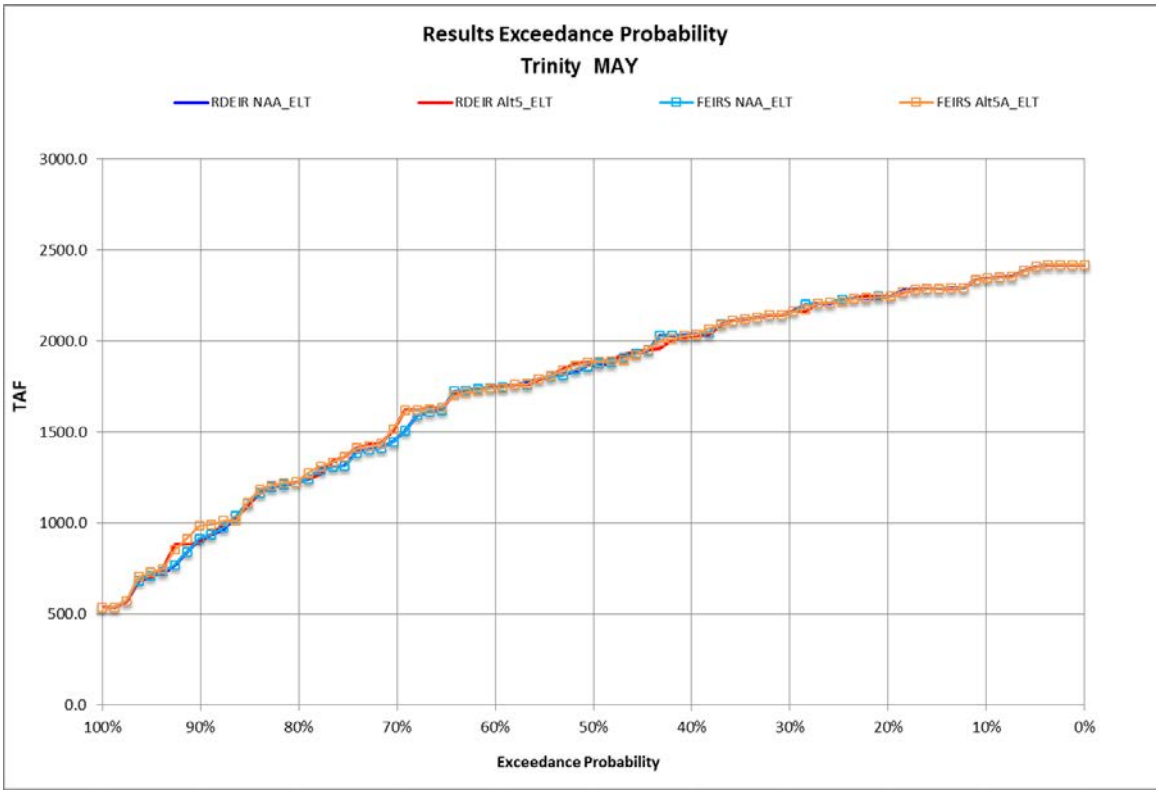

Figure 5F.5-1. Storage Exceedance Probability for Trinity Lake, End of May (Alt5A ELT)

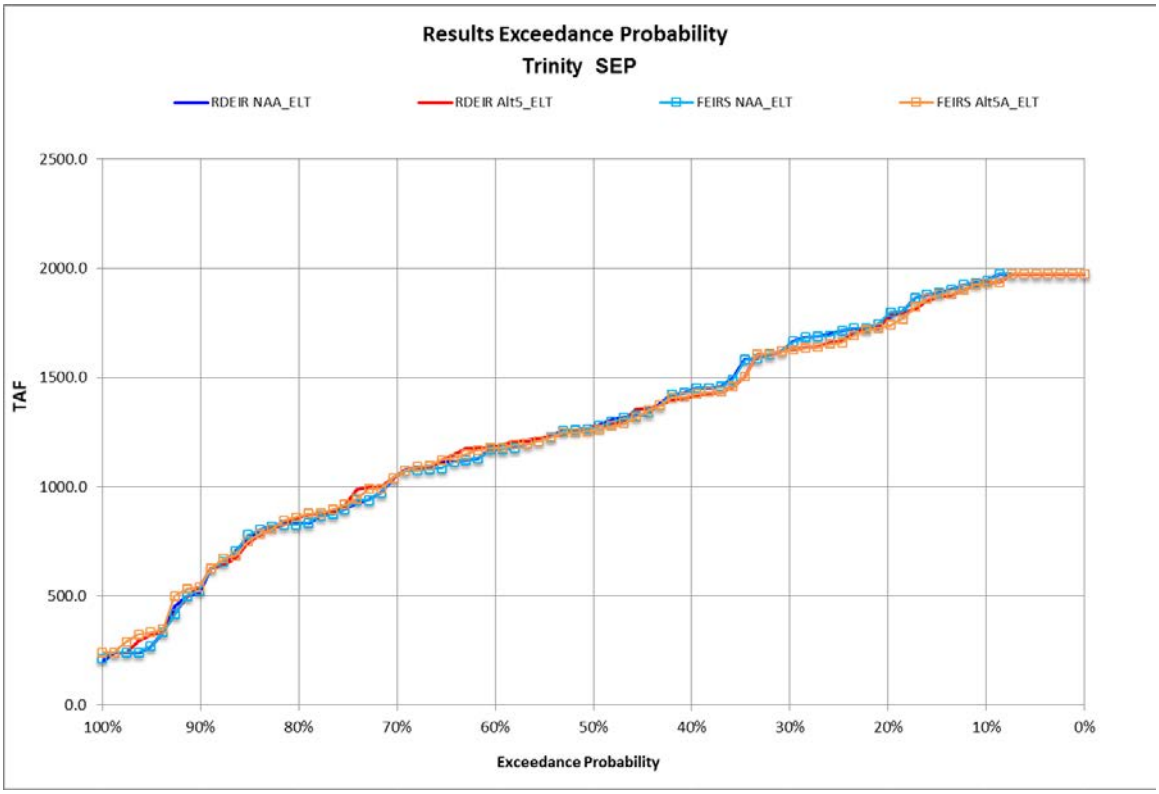

Figure 5F.5-2. Storage Exceedance Probability for Trinity Lake, End of September (Alt5A ELT)

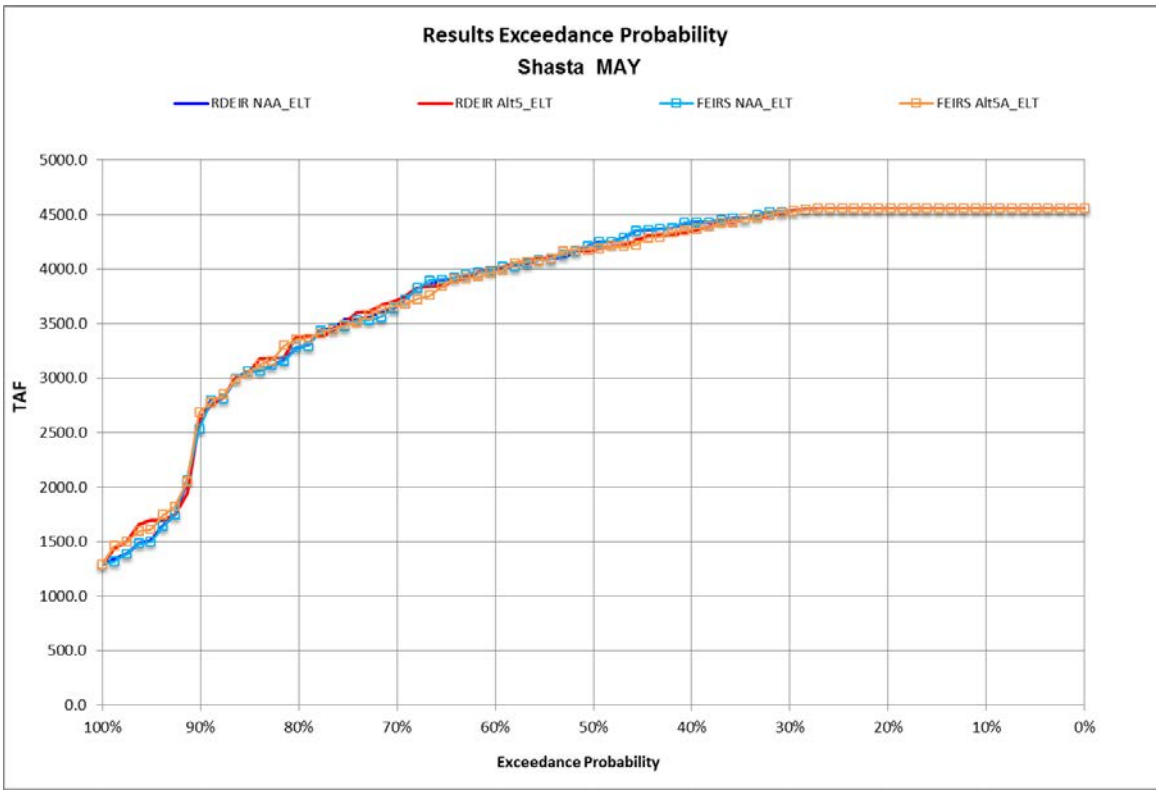

Figure 5F.5-3. Storage Exceedance Probability for Shasta Lake, End of May (Alt5A ELT)

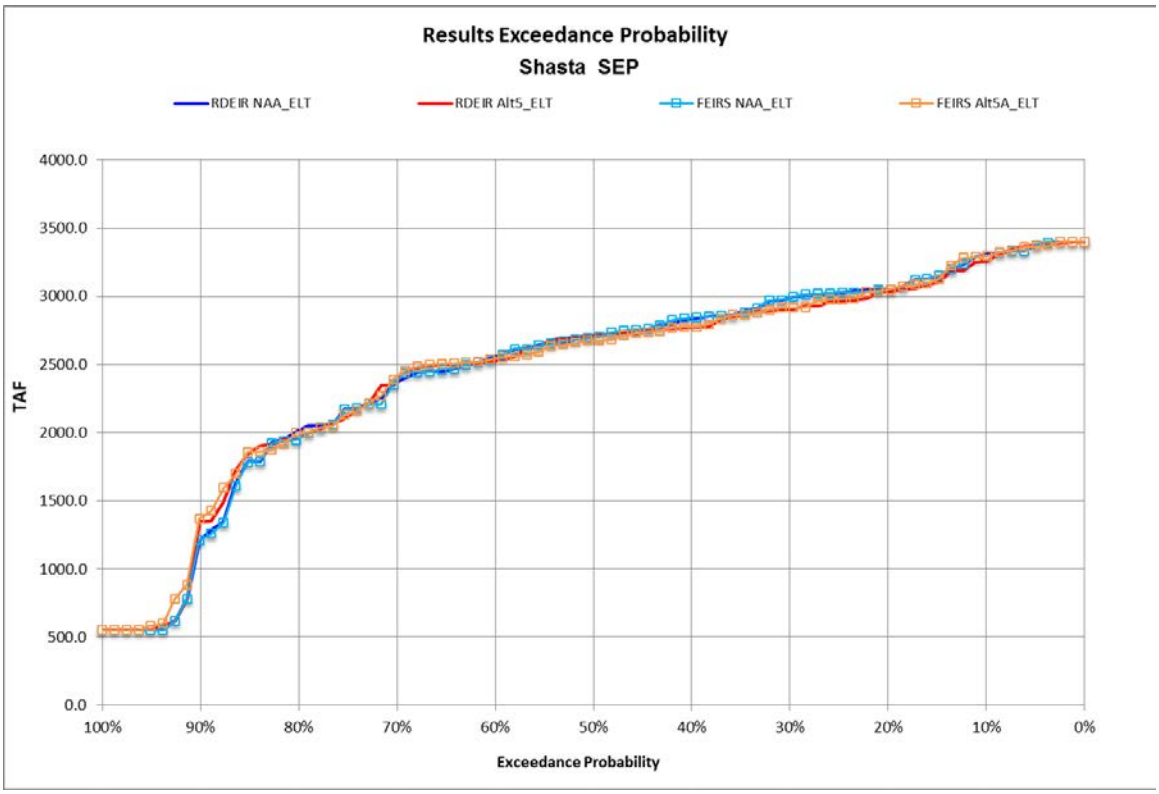

Figure 5F.5-4. Storage Exceedance Probability for Shasta Lake, End of September (Alt5A ELT)

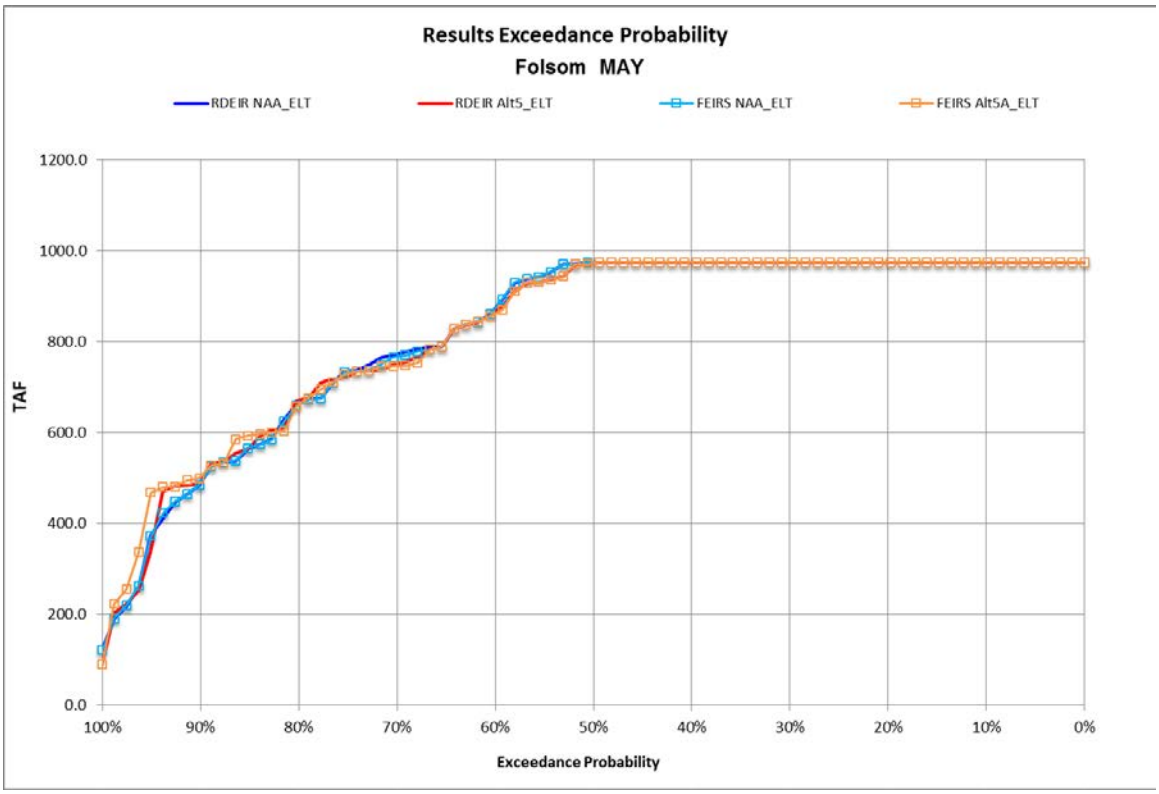

Figure 5F.5-5. Storage Exceedance Probability for Folsom Lake, End of May (Alt5A ELT)

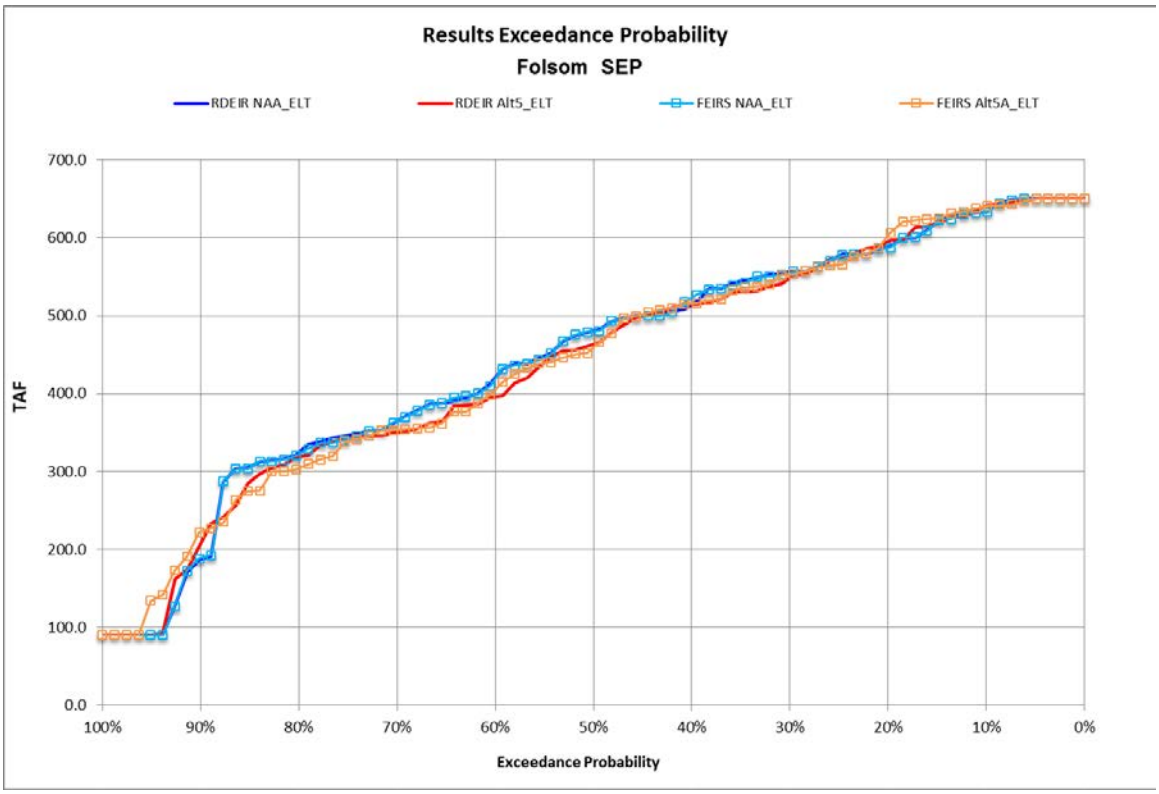

Figure 5F.5-6. Storage Exceedance Probability for Folsom Lake, End of September (Alt5A ELT)

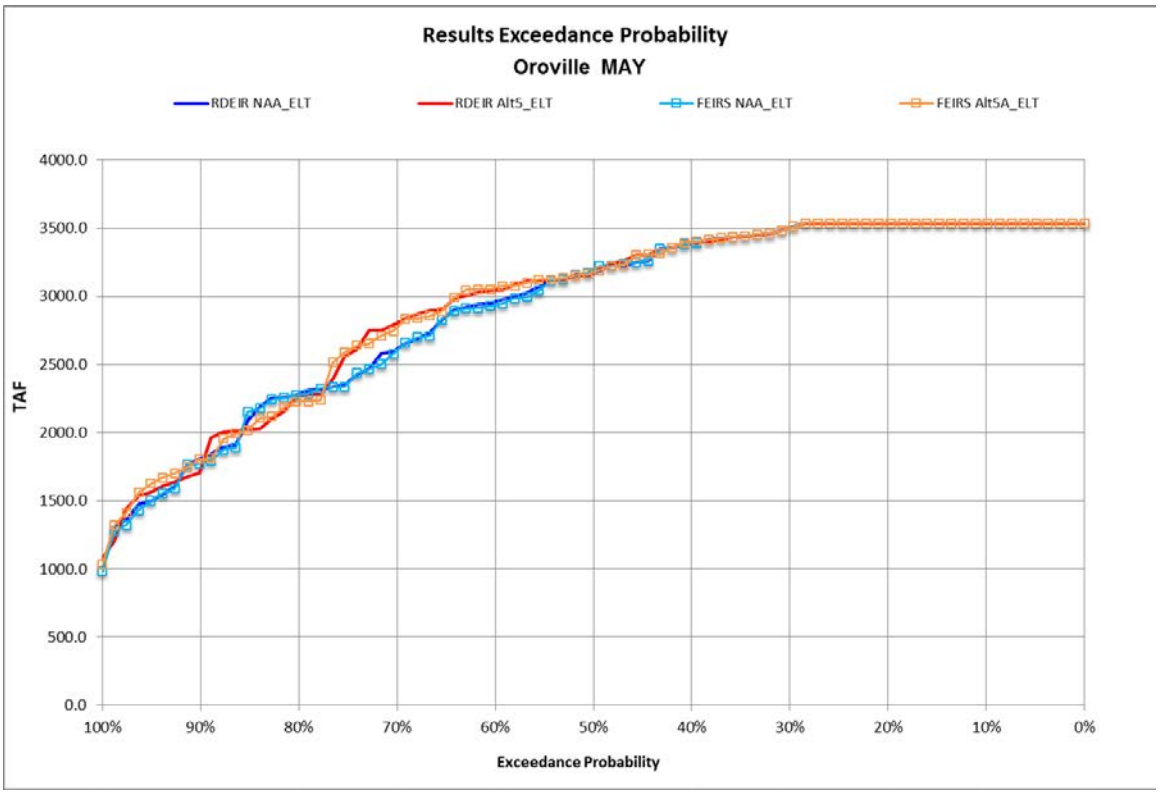

Figure 5F.5-7. Storage Exceedance Probability for Lake Oroville, End of May (Alt5A ELT)

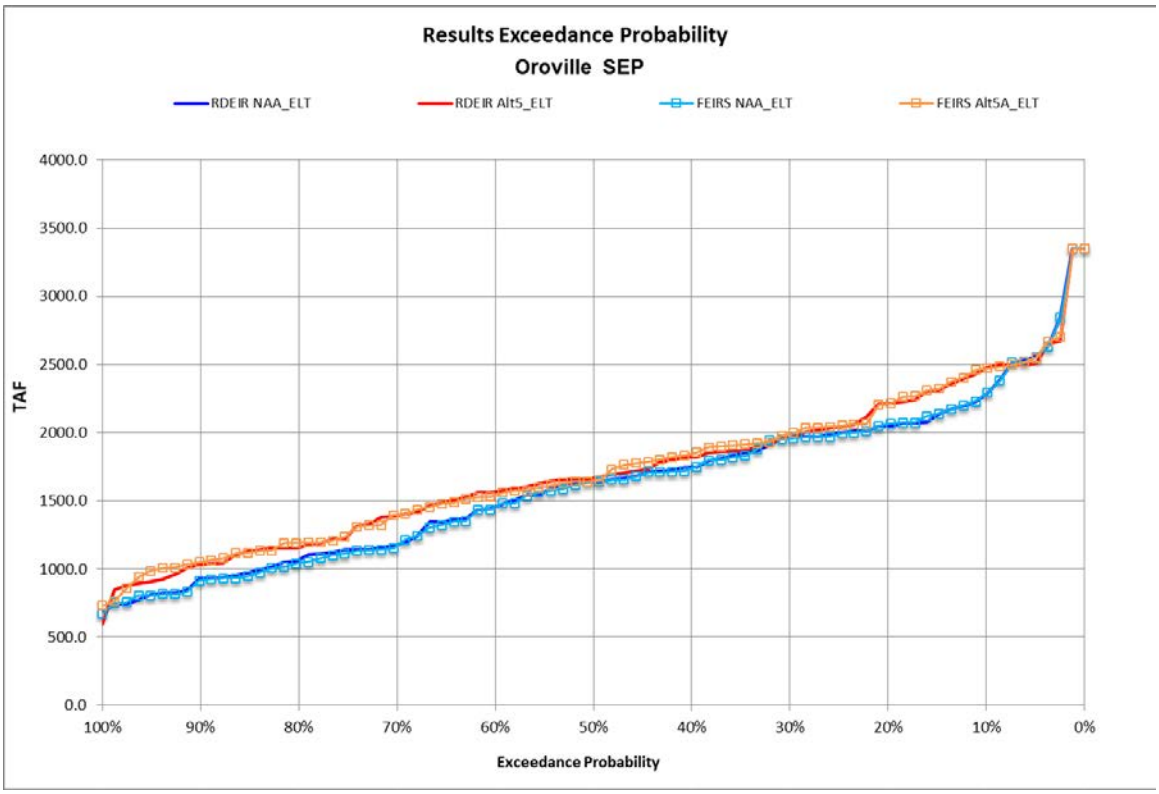

Figure 5F.5-8. Storage Exceedance Probability for Lake Oroville, End of September (Alt5A ELT)

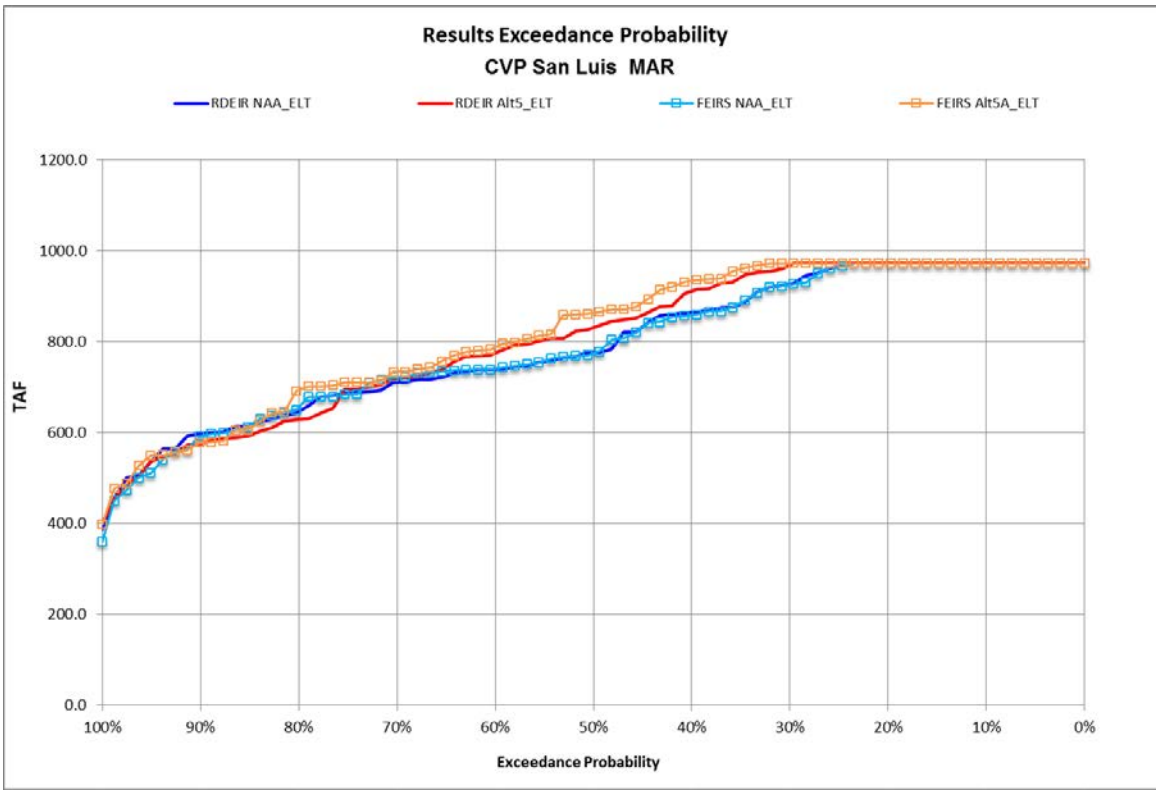

Figure 5F.5-9. Storage Exceedance Probability for CVP San Luis, End of March (Alt5A ELT)

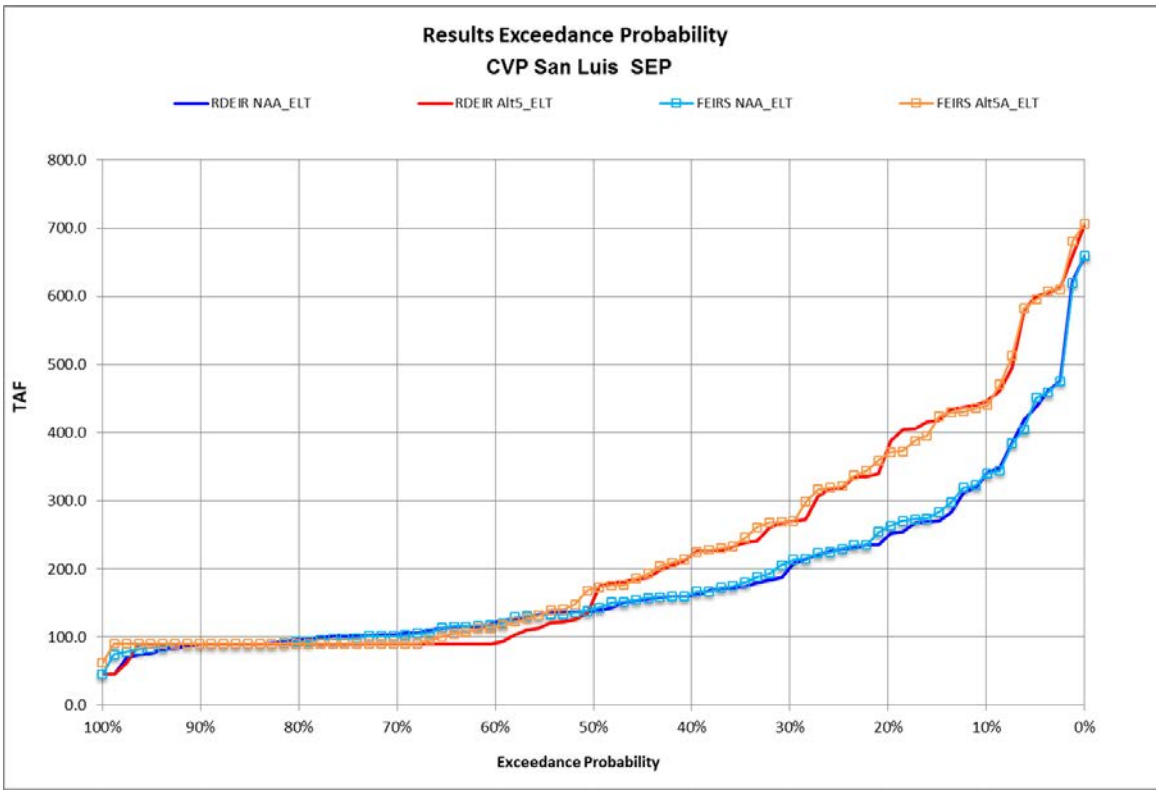

Figure 5F.5-10. Storage Exceedance Probability for CVP San Luis, End of September (Alt5A ELT)

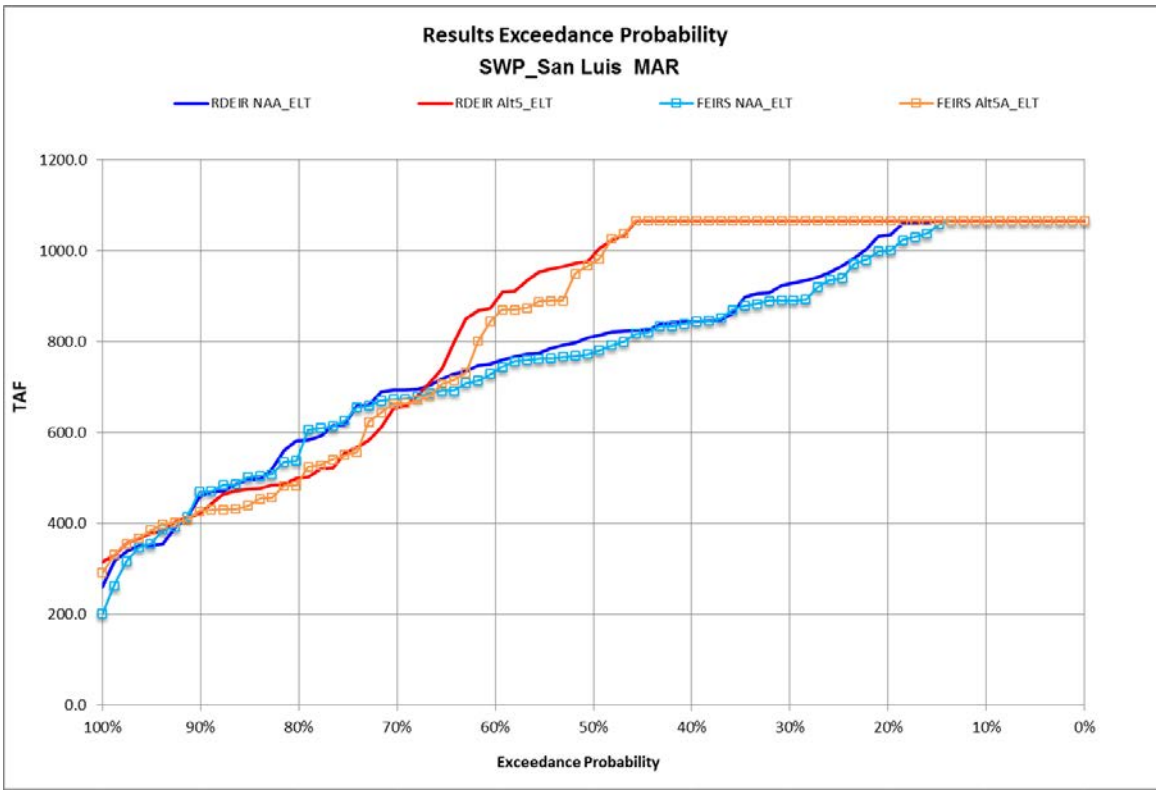

Figure 5F.5-11. Storage Exceedance Probability for SWP San Luis, End of March (Alt5A ELT)

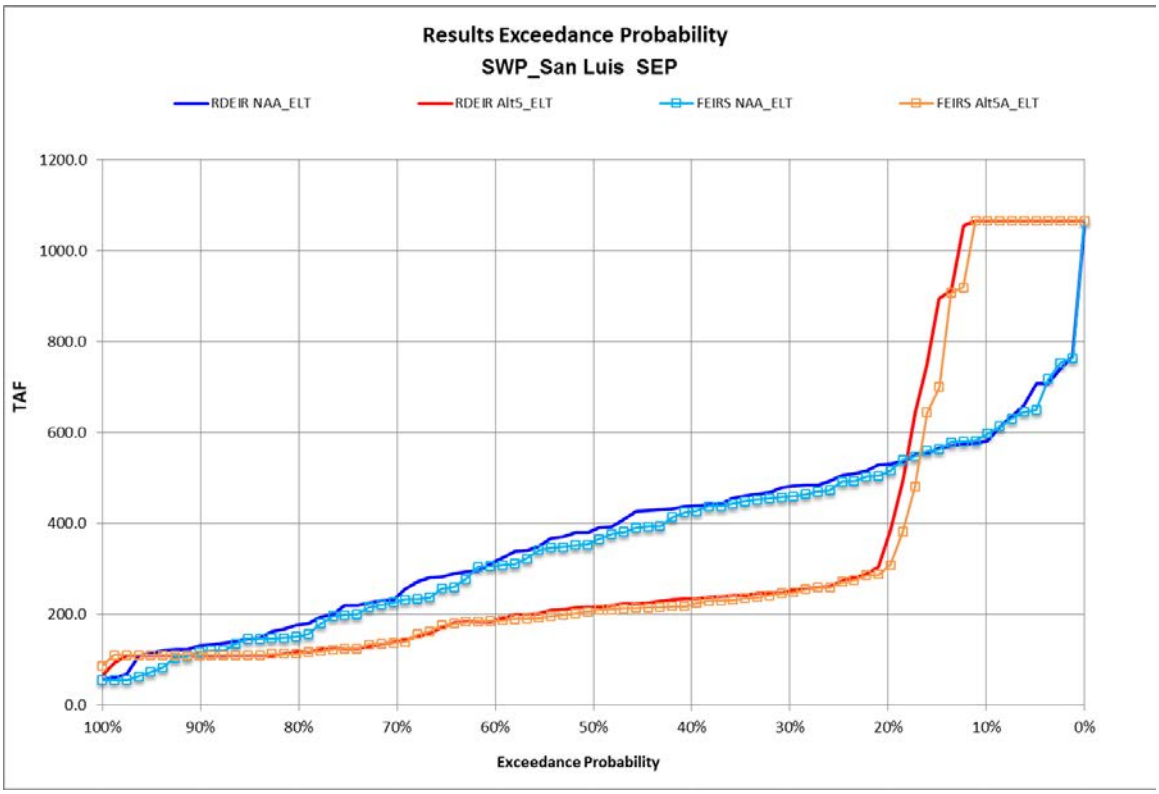

Figure 5F.5-12. Storage Exceedance Probability for SWP San Luis, End of September (Alt5A ELT)

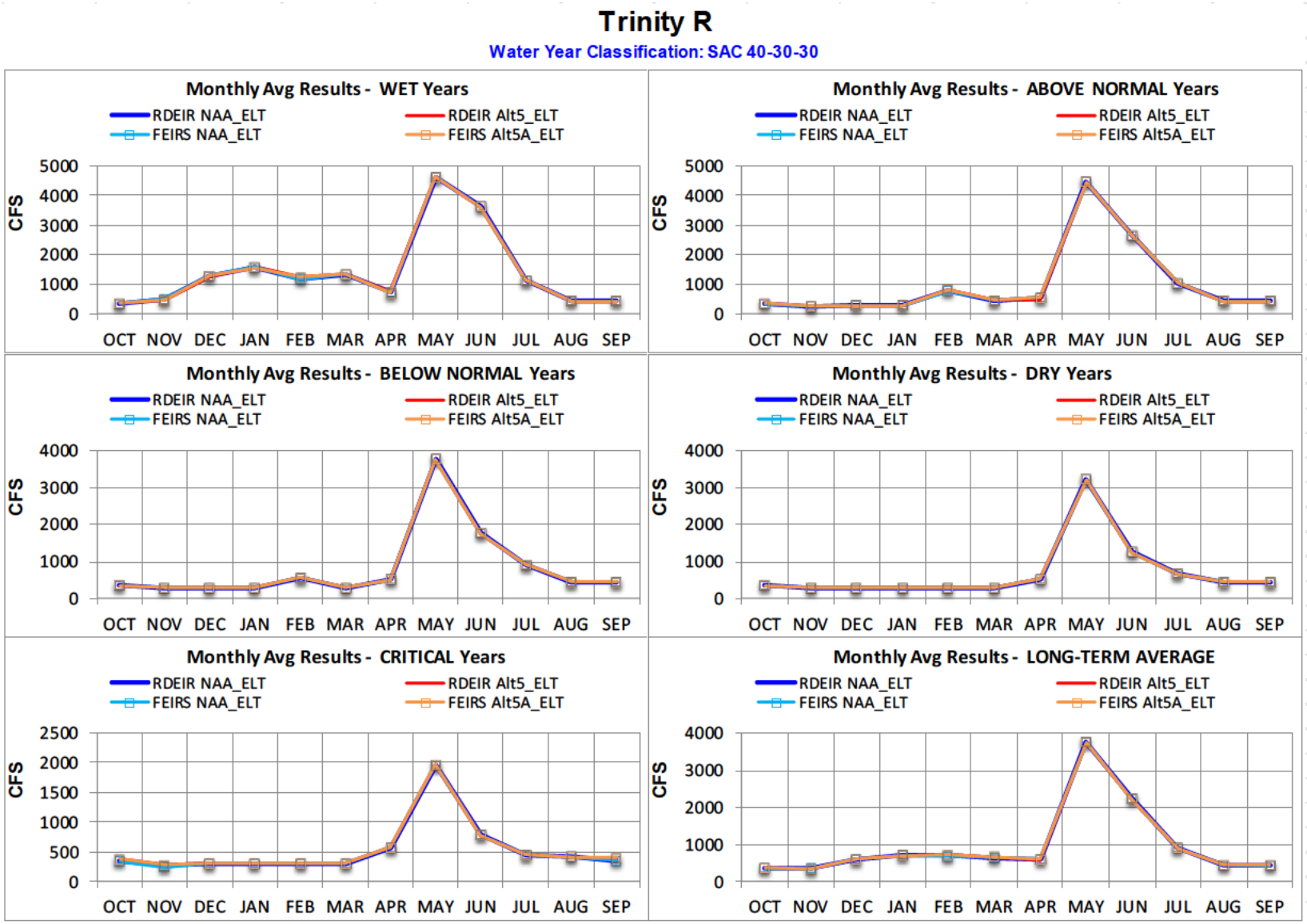

Figure 5F.5-13. Trinity River below Lewiston, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

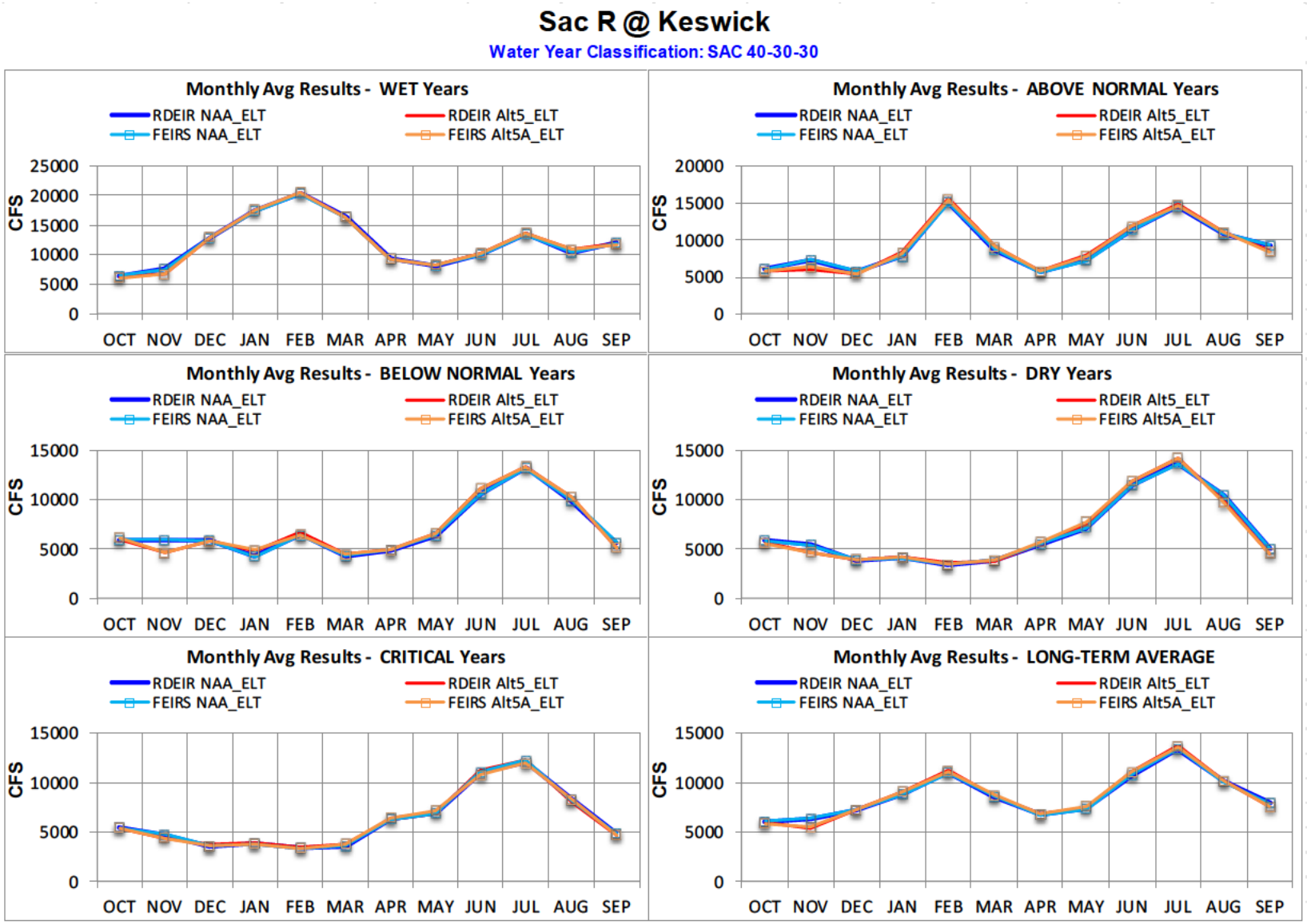

Figure 5F.5-14. Sacramento River below Keswick, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

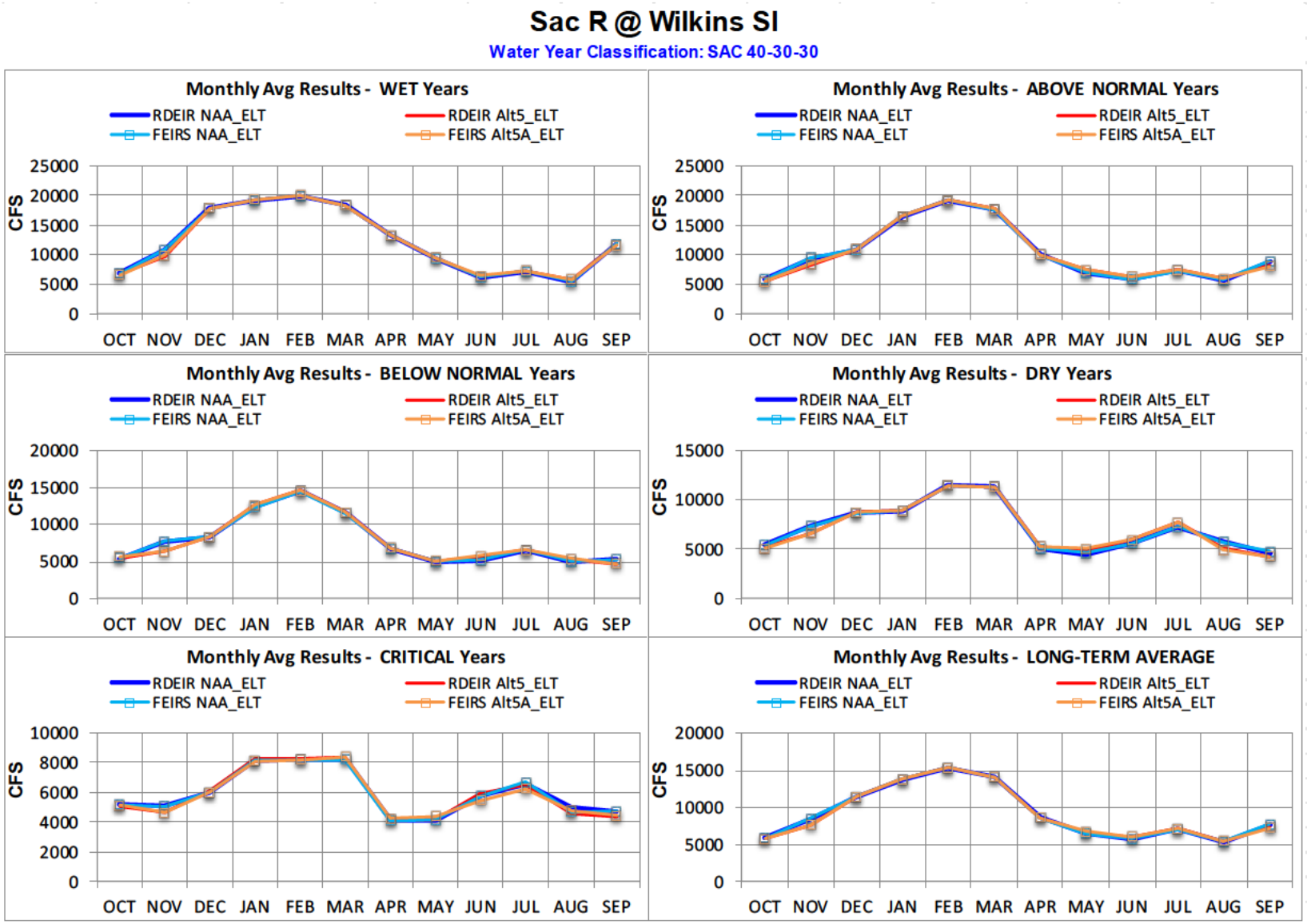

Figure 5F.5-15. Sacramento River at Wilkins Slough, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

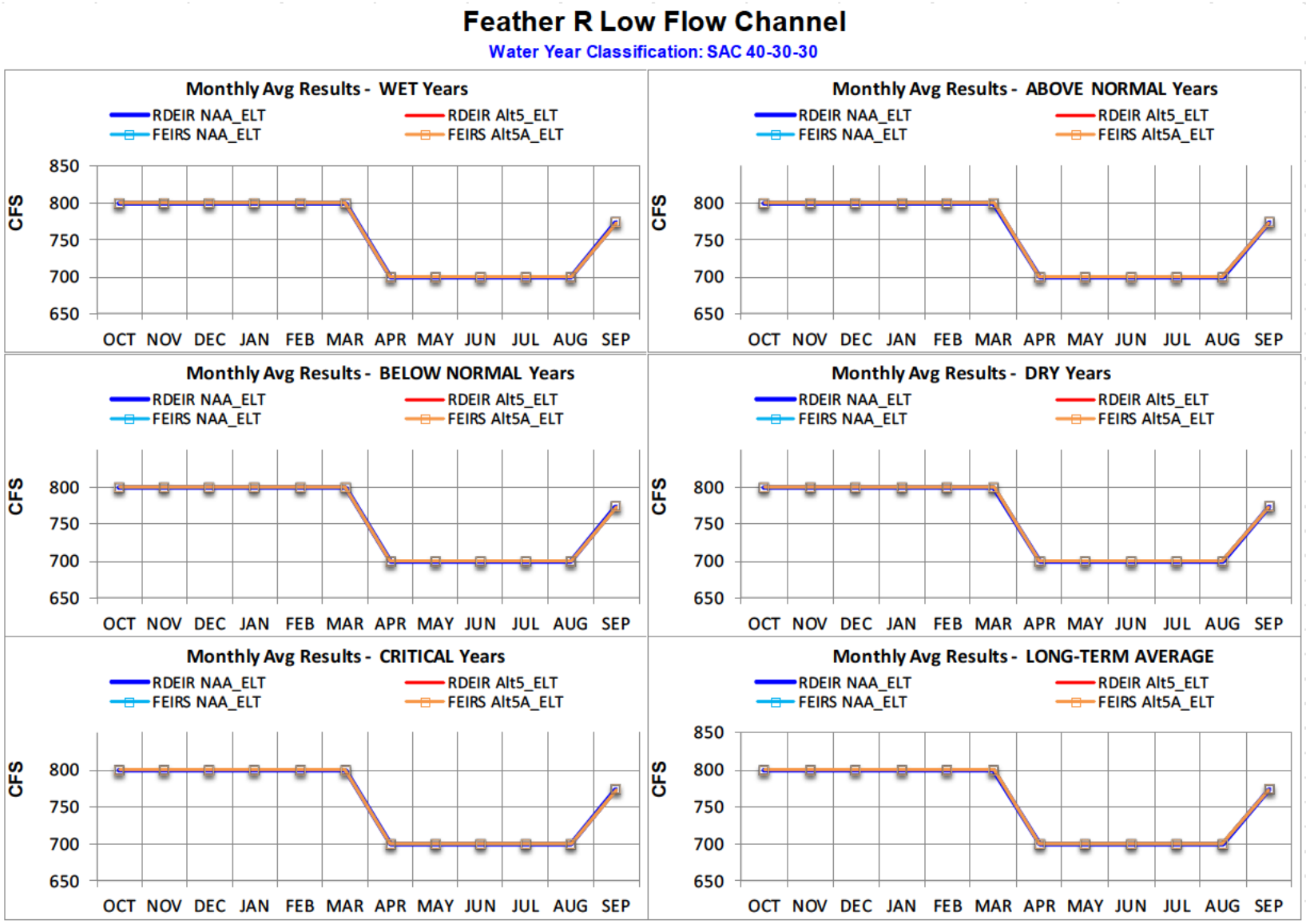

Figure 5F.5-16. Feather River Low Flow Channel, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

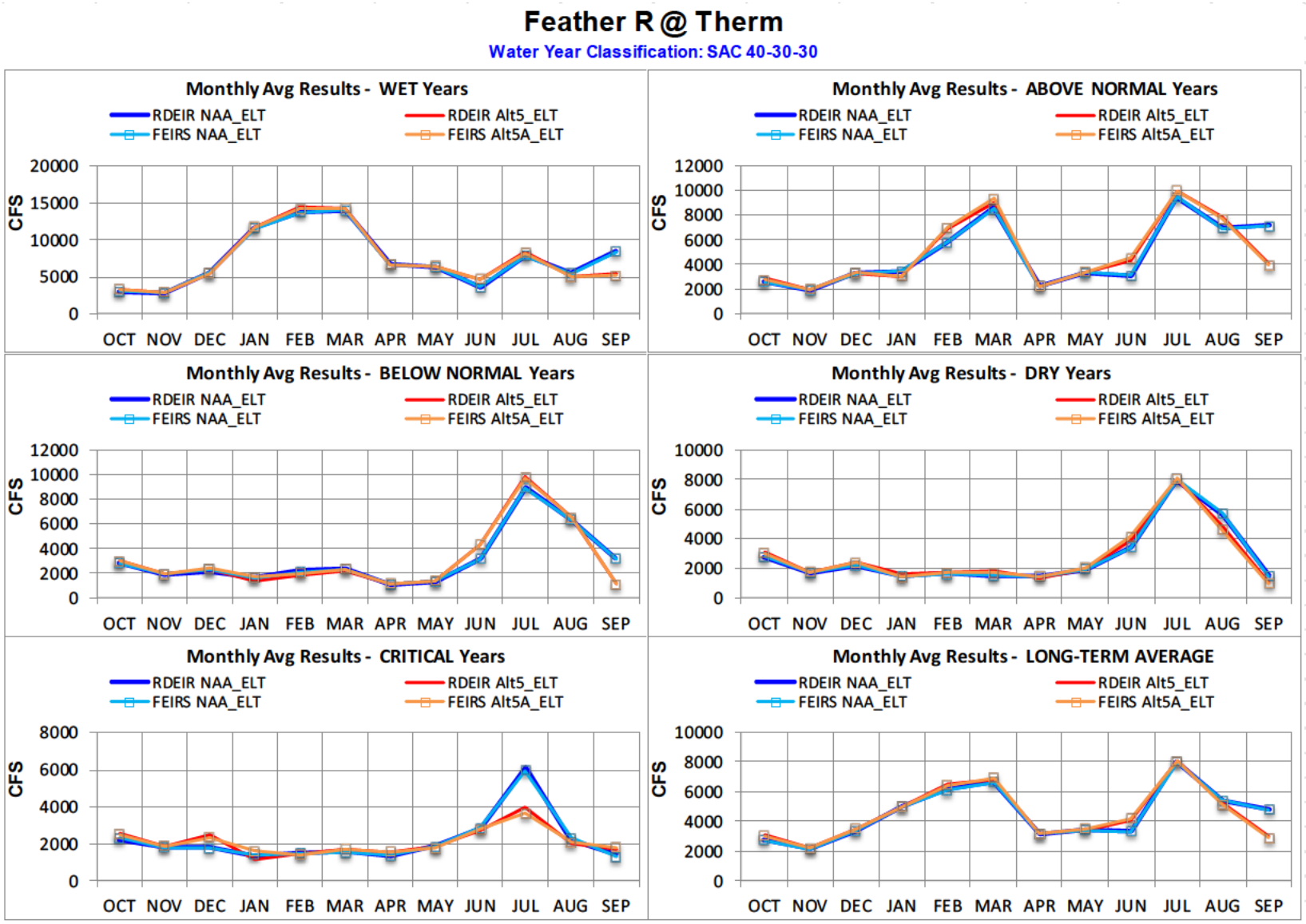

Figure 5F.5-17. Feather River below Thermalito, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

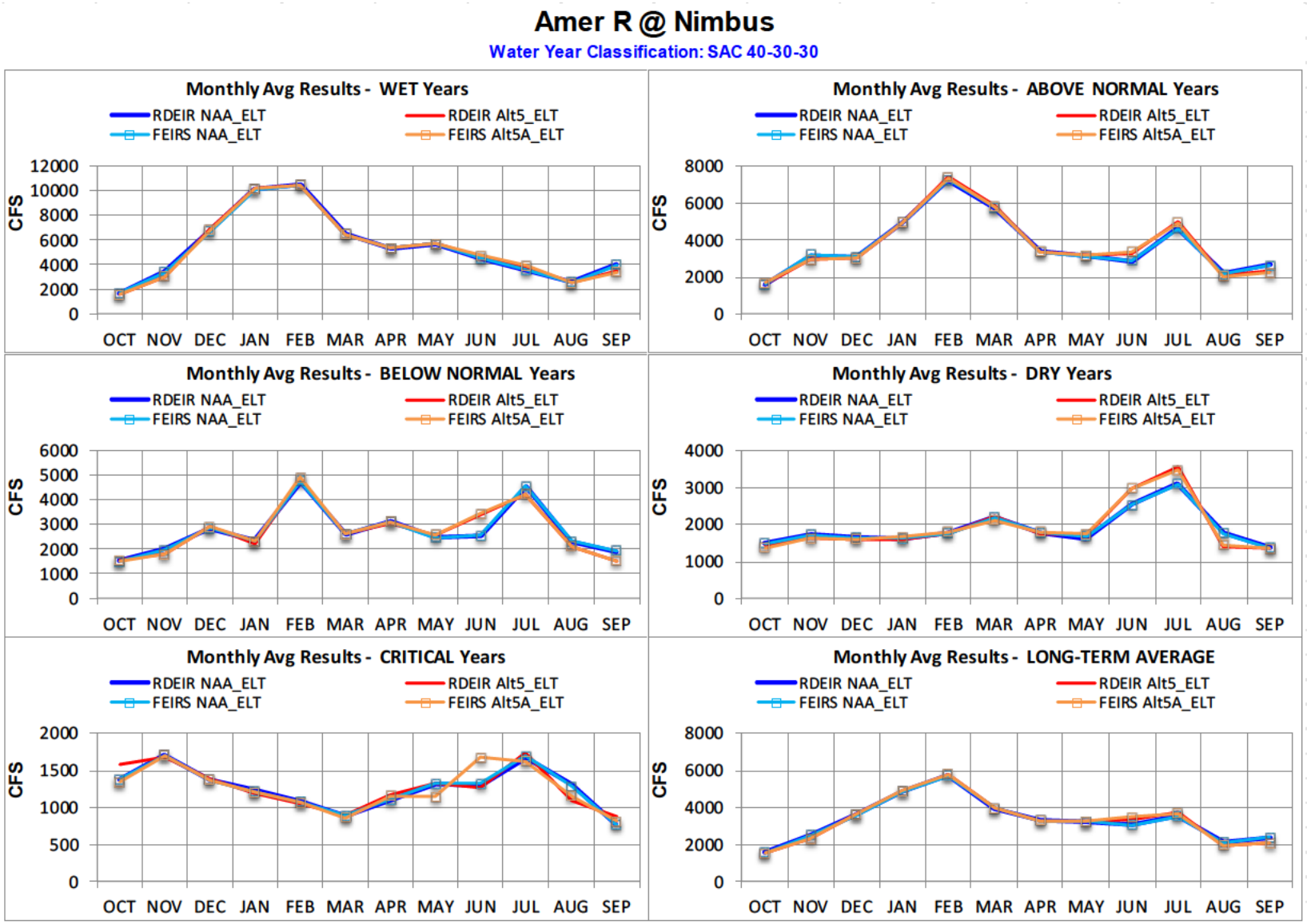

Figure 5F.5-18. American River below Nimbus, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

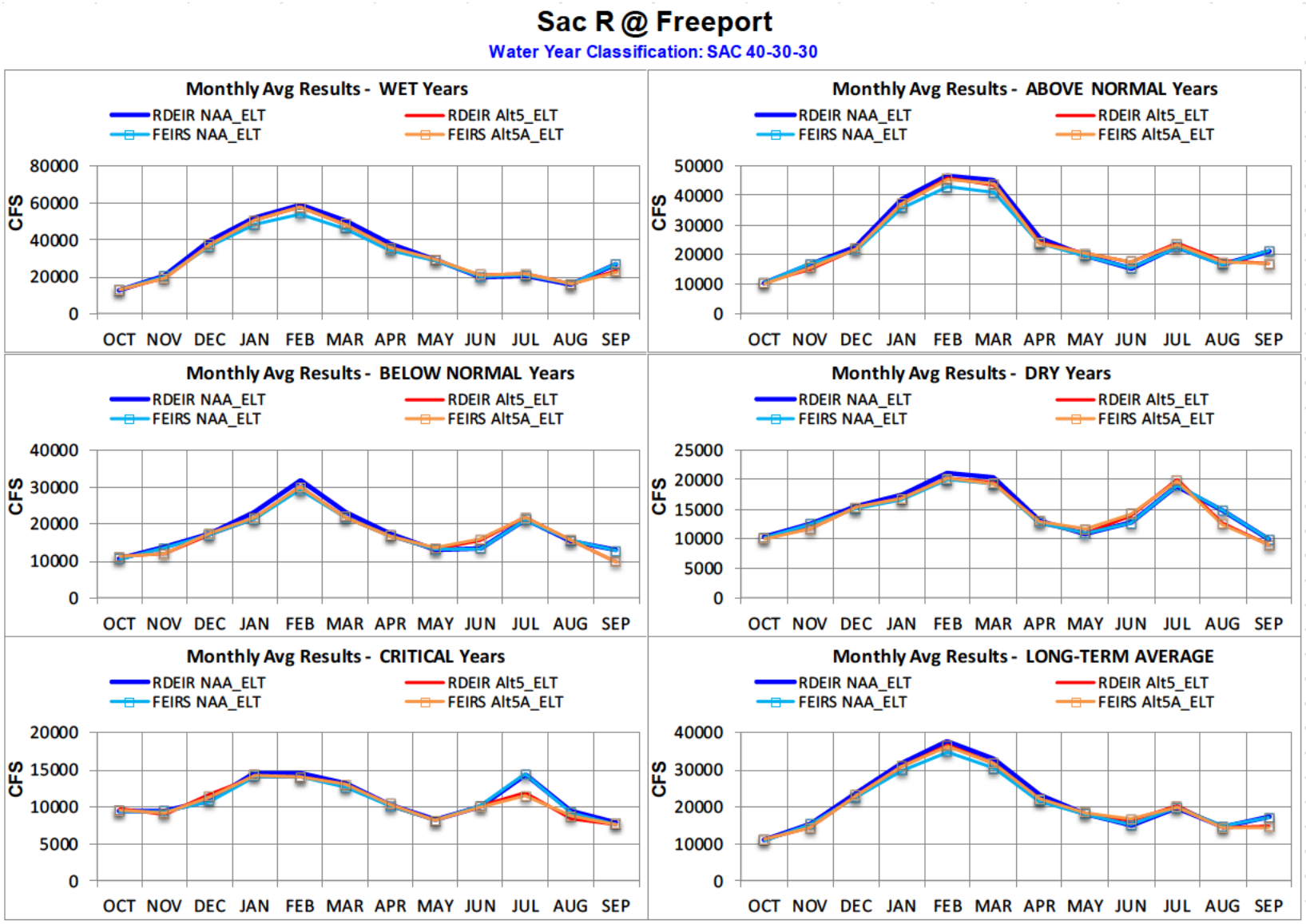

Figure 5F.5-19. Sacramento River at Freeport, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

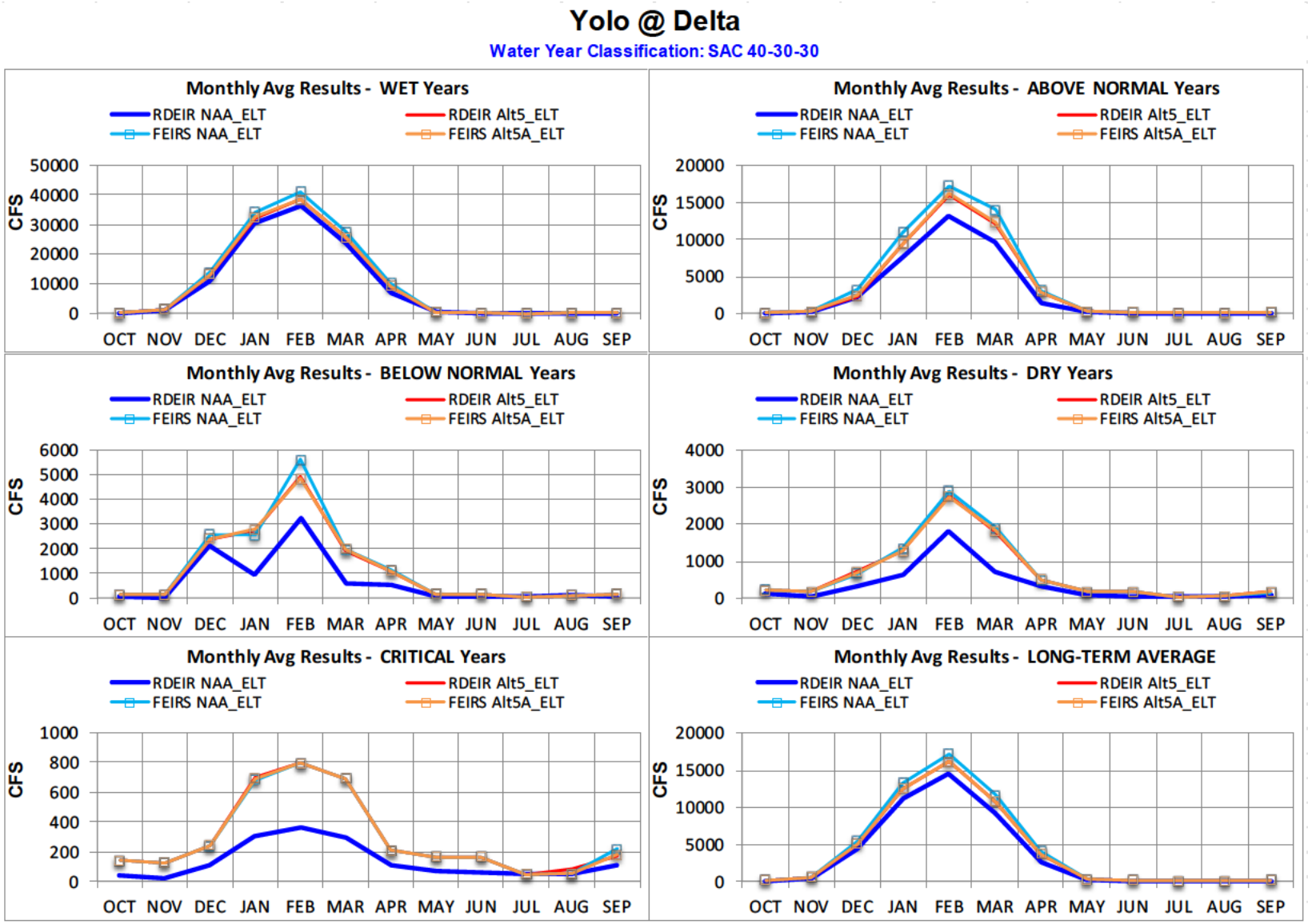

Figure 5F.5-20. Yolo Bypass at Delta, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

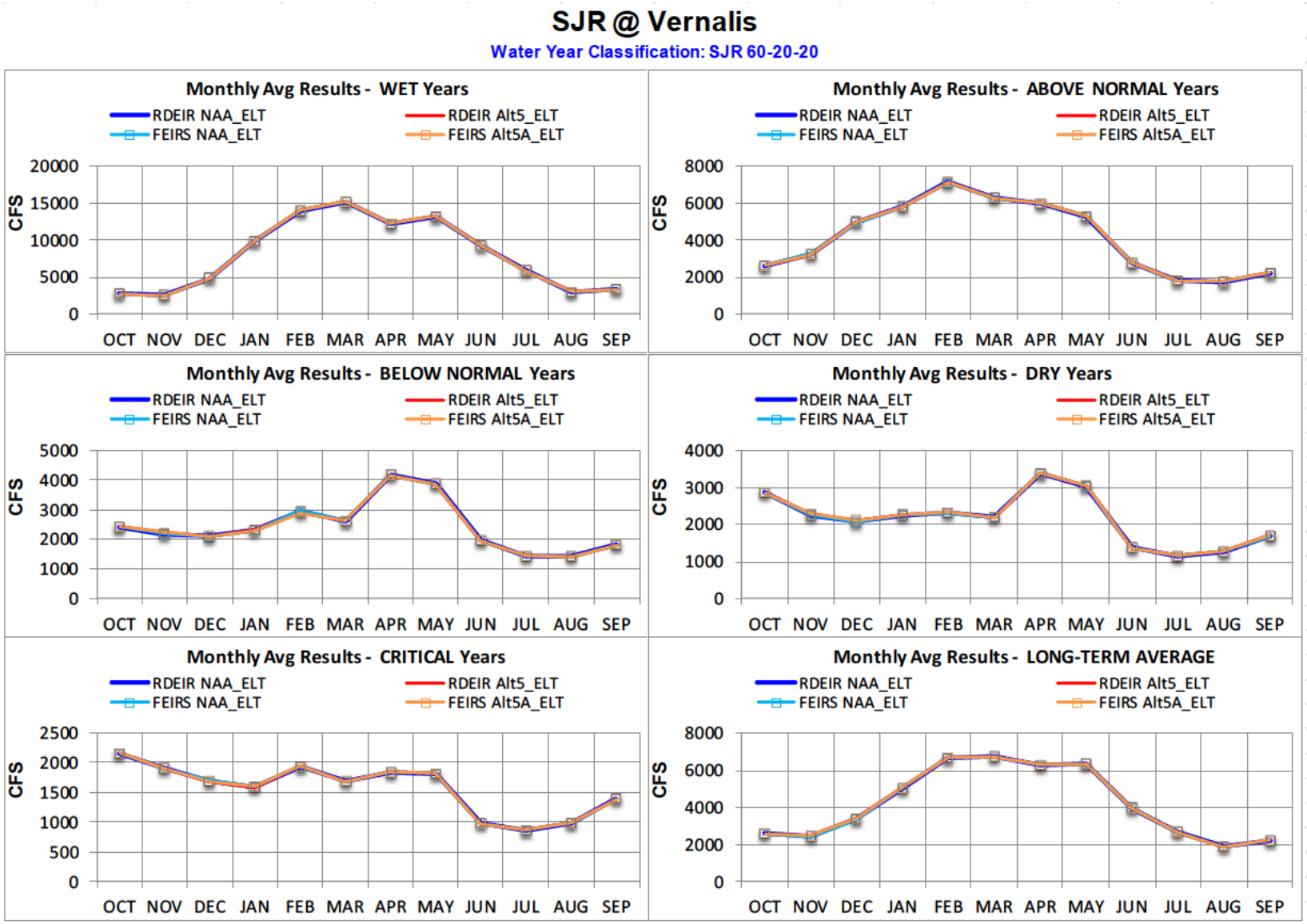

Figure 5F.5-21. San Joaquin River at Vernalis, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

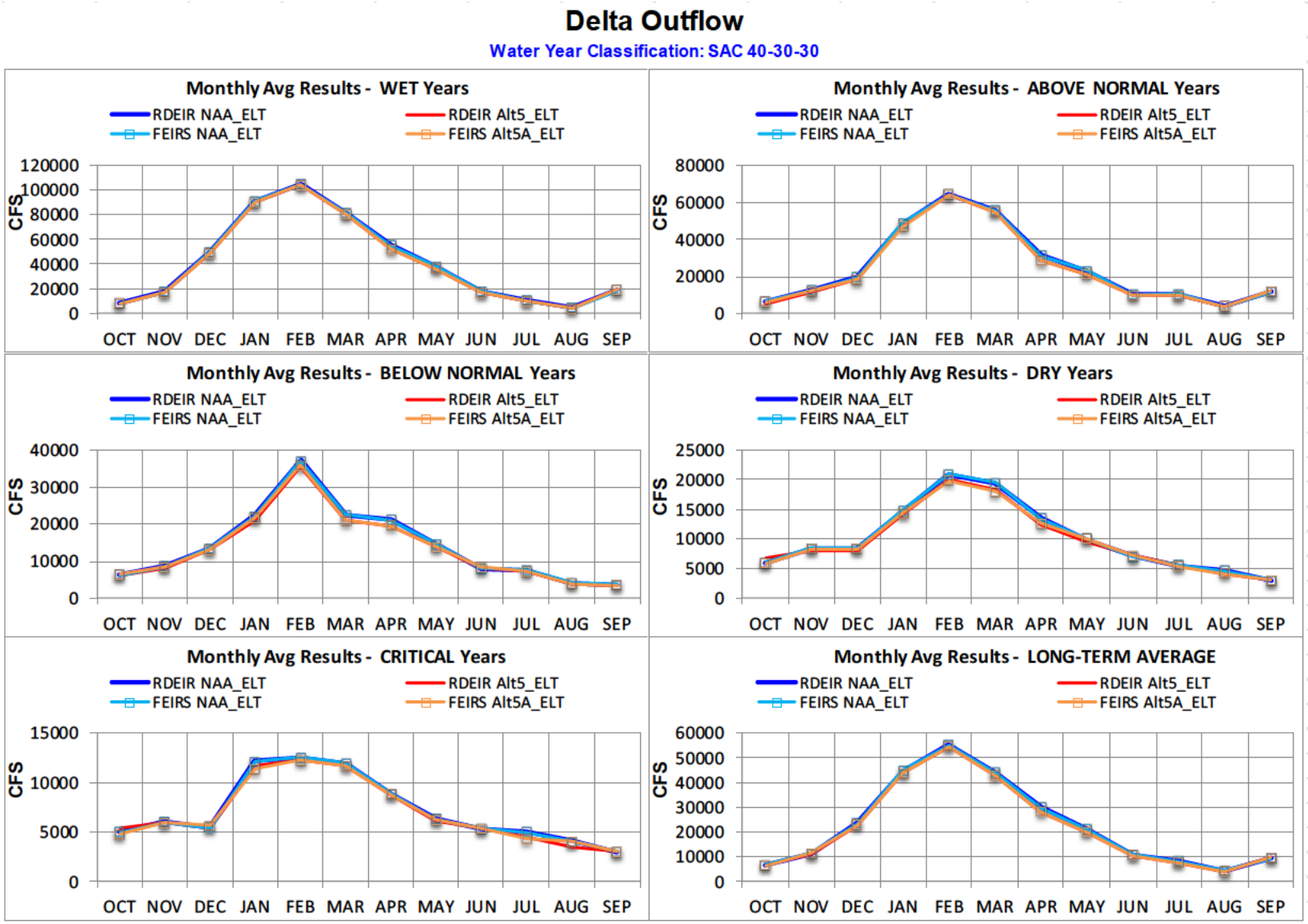

Figure 5F.5-22. Delta Outflow, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

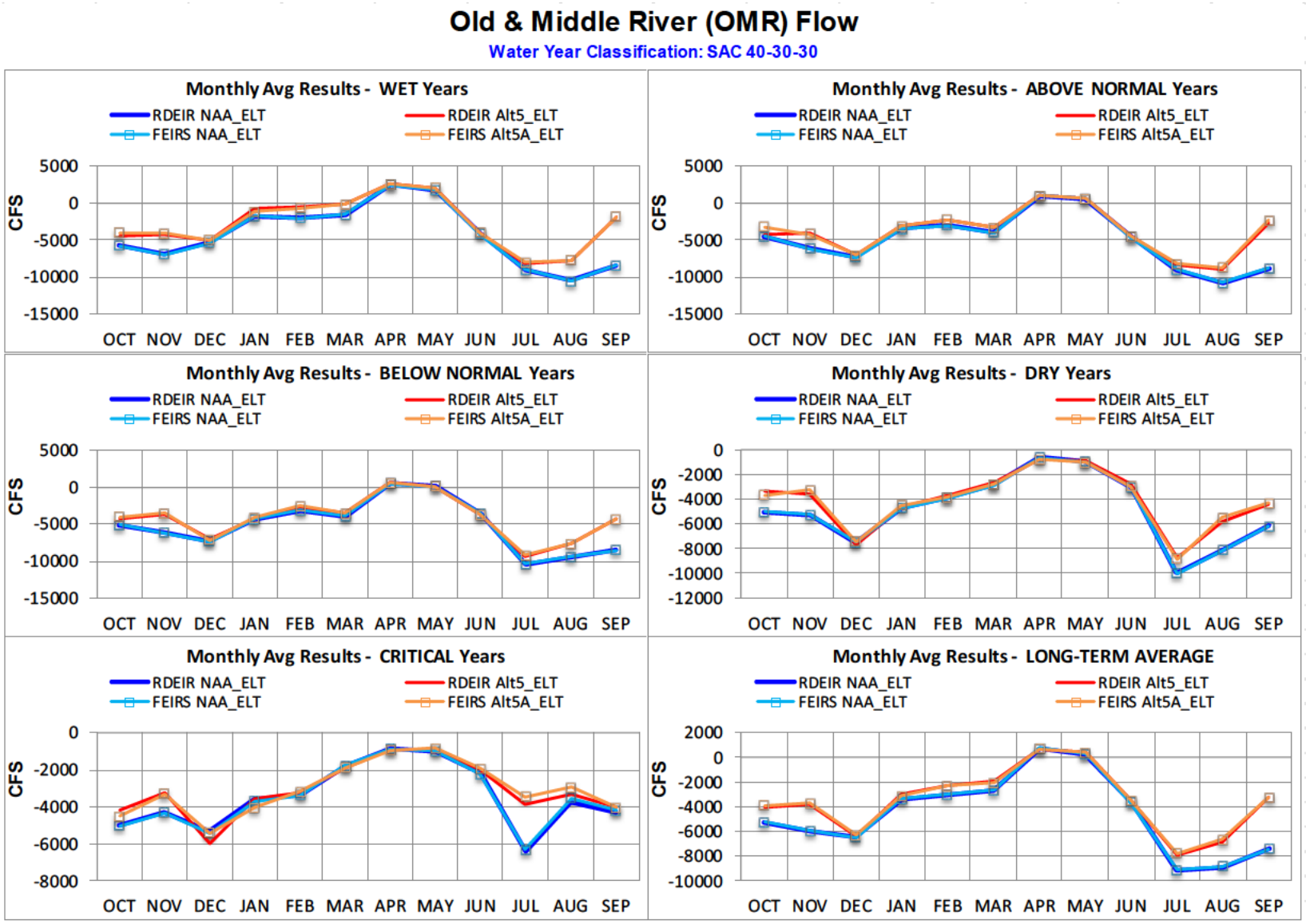

Figure 5F.5-23. Combined Old and Middle River Flow, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

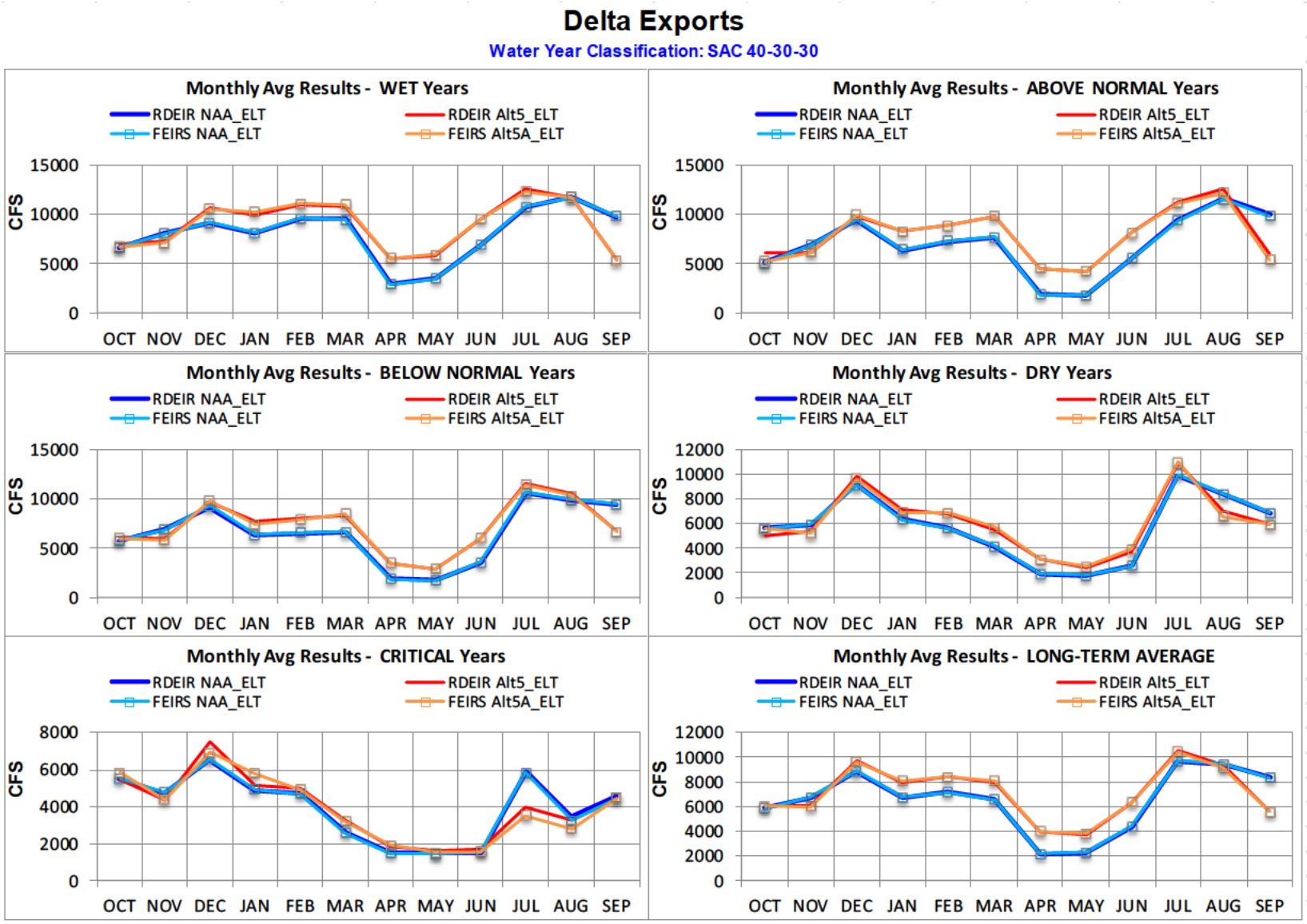

Figure 5F.5-24. Total Delta Exports, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

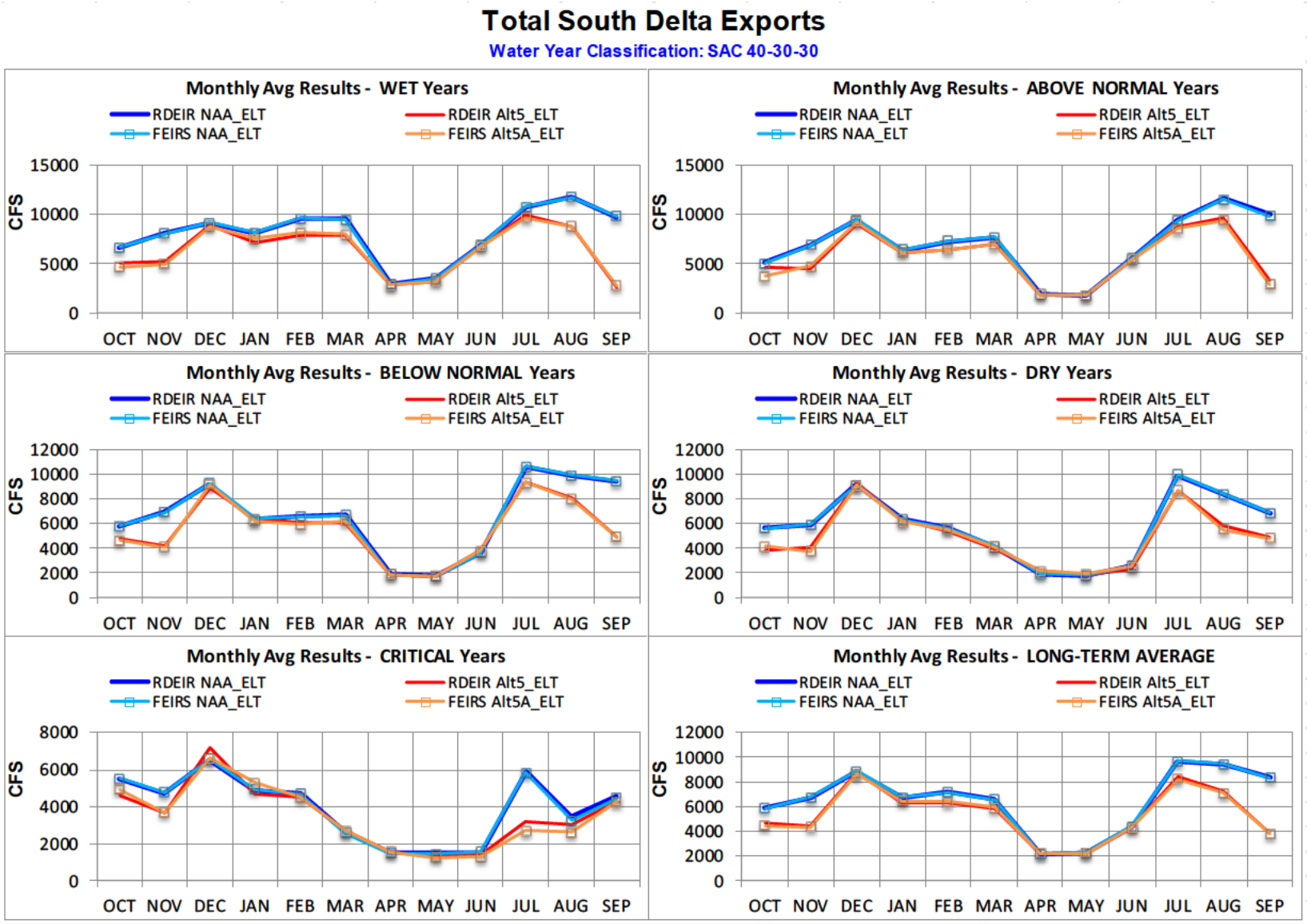

Figure 5F.5-25. Total South Delta Exports, Monthly Average Flow (Alt5A ELT) *[WYT based on current climate]*

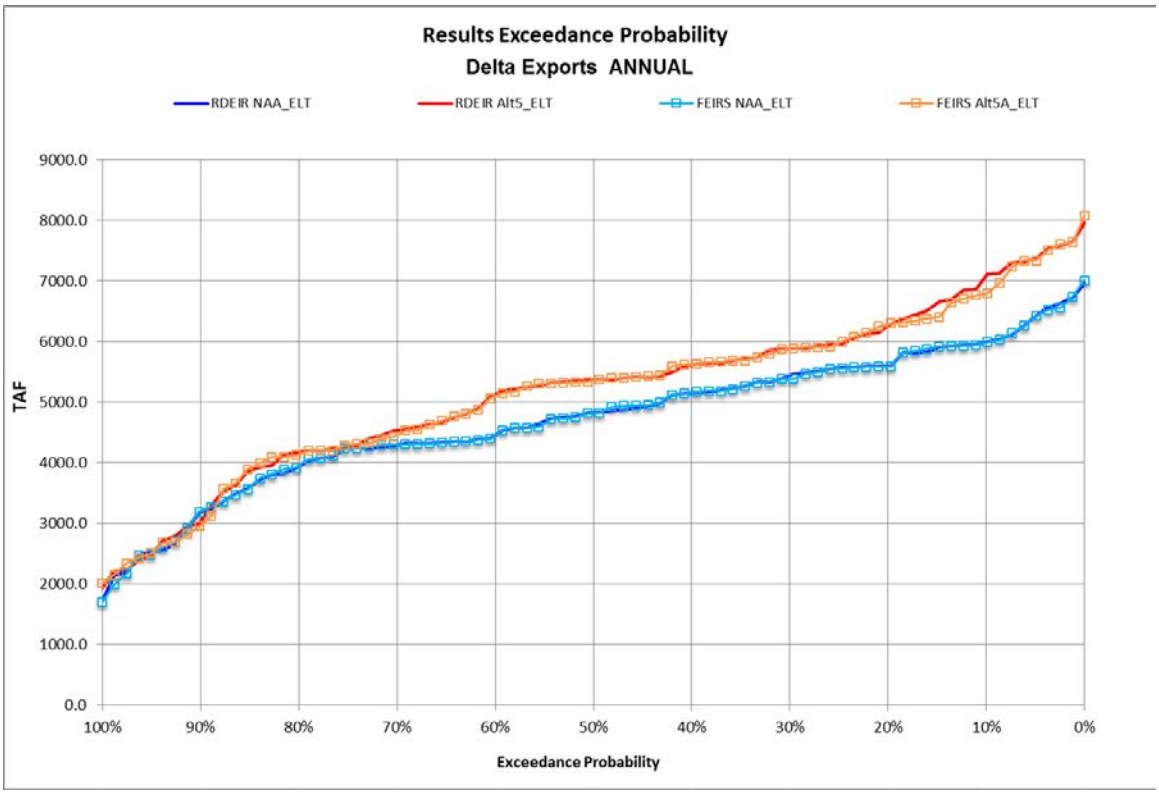

Figure 5F.5-26. Annual (Oct-Sep) Delta Exports Exceedance Probability (Alt5A ELT)

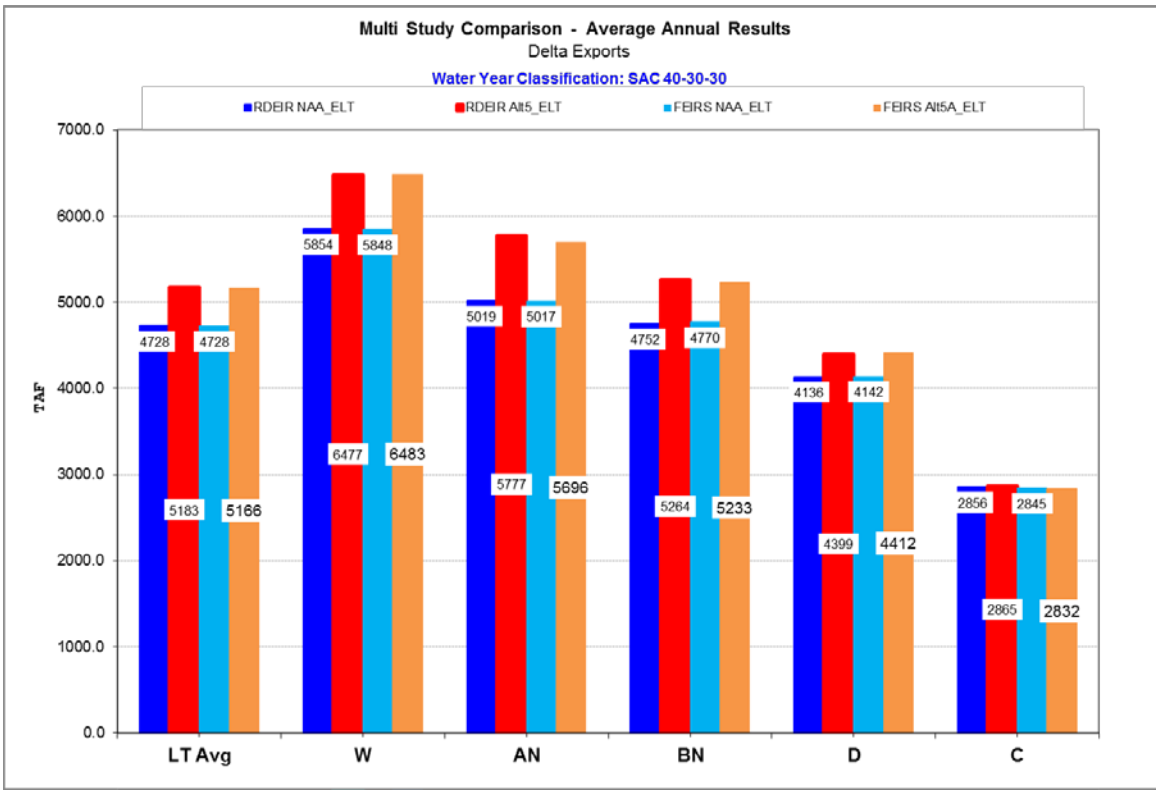

Figure 5F.5-27. Annual (Oct-Sep) Delta Exports by WYT (Alt5A ELT) *[WYT based on current climate]*

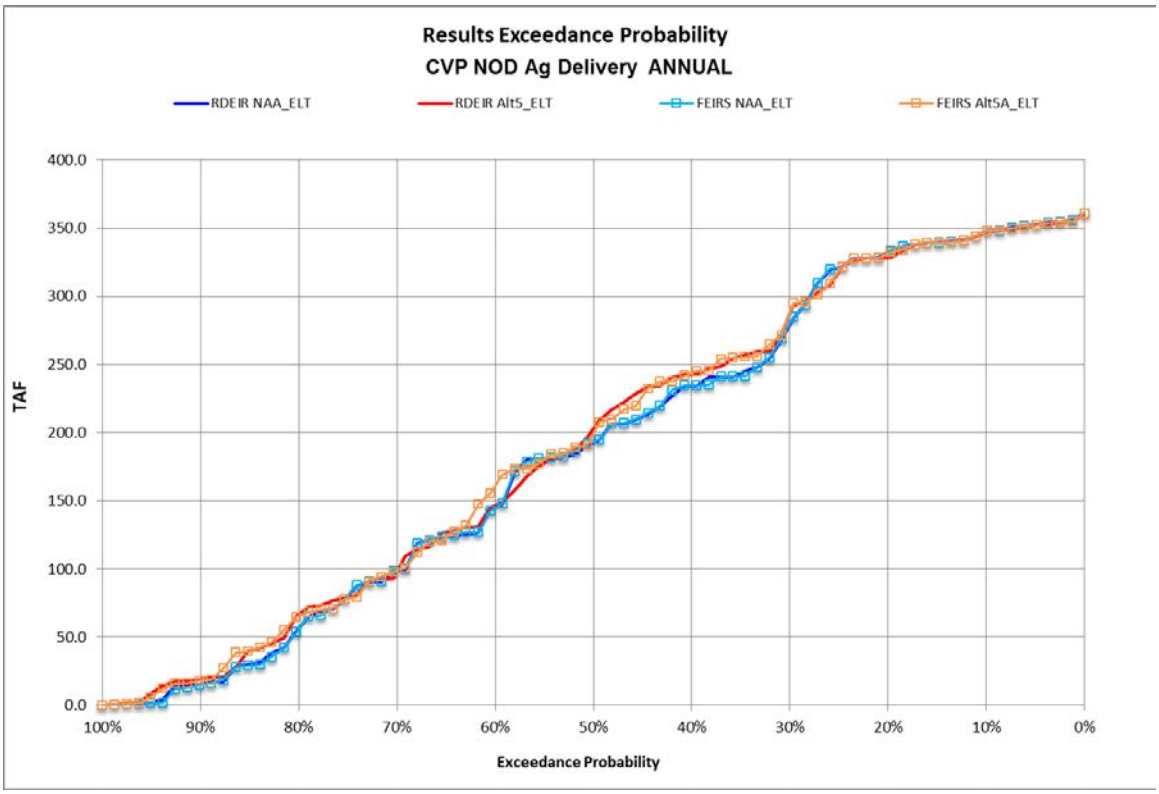

Figure 5F.5-28. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries Exceedance Probability (Alt5A ELT)

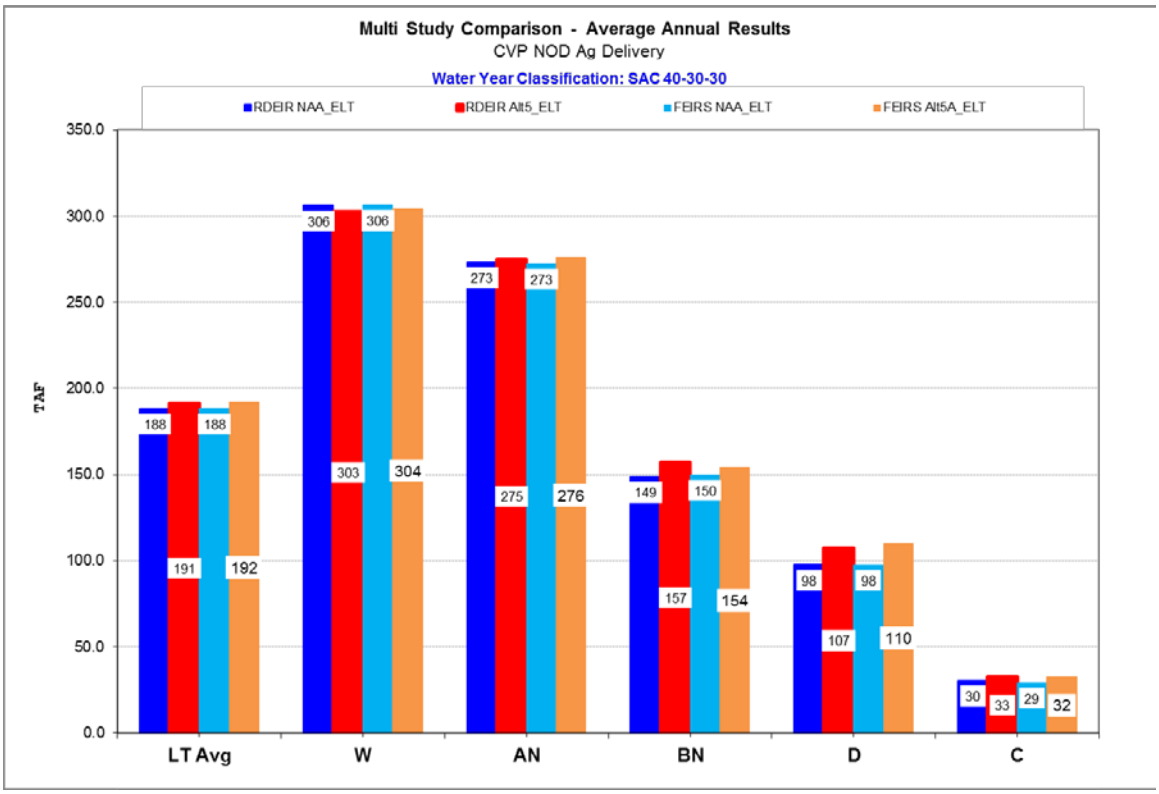

Figure 5F.5-29. Annual (Oct-Sep) CVP North-of-Delta Ag Deliveries by WYT (Alt5A ELT)
[WYT per current climate]

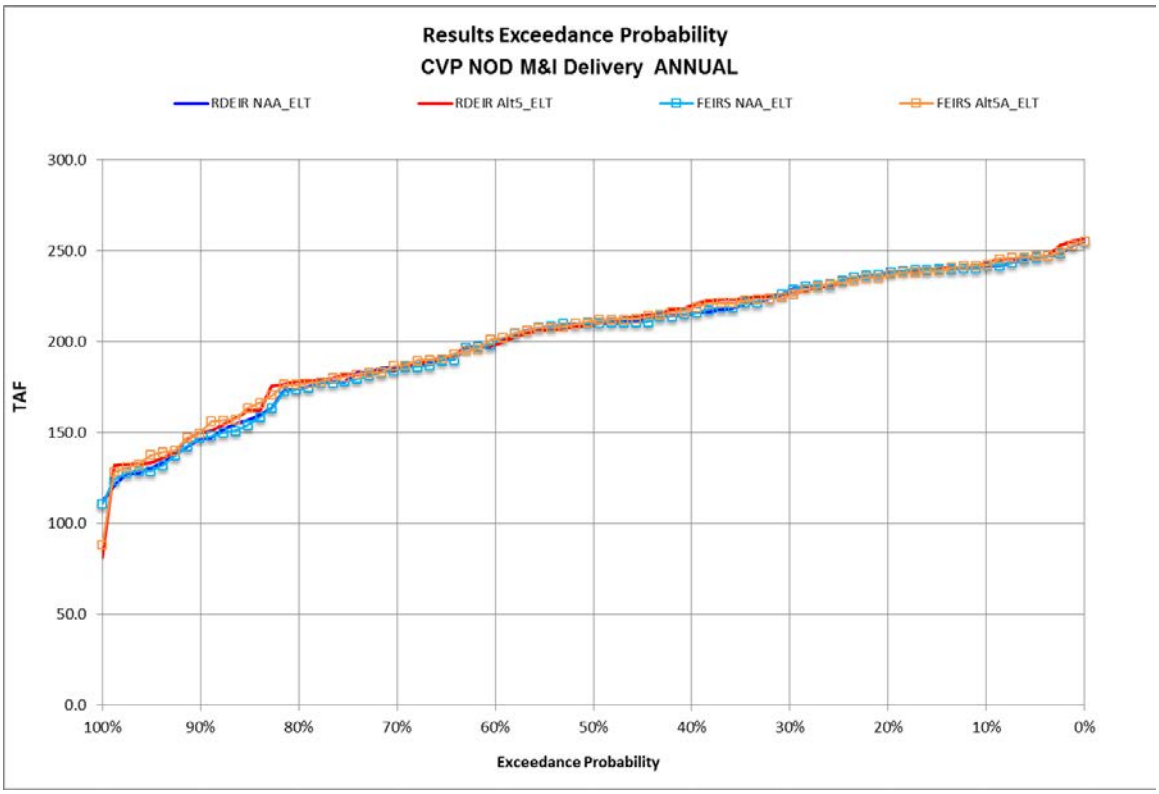

Figure 5F.5-30. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries Exceedance Probability (Alt5A ELT)

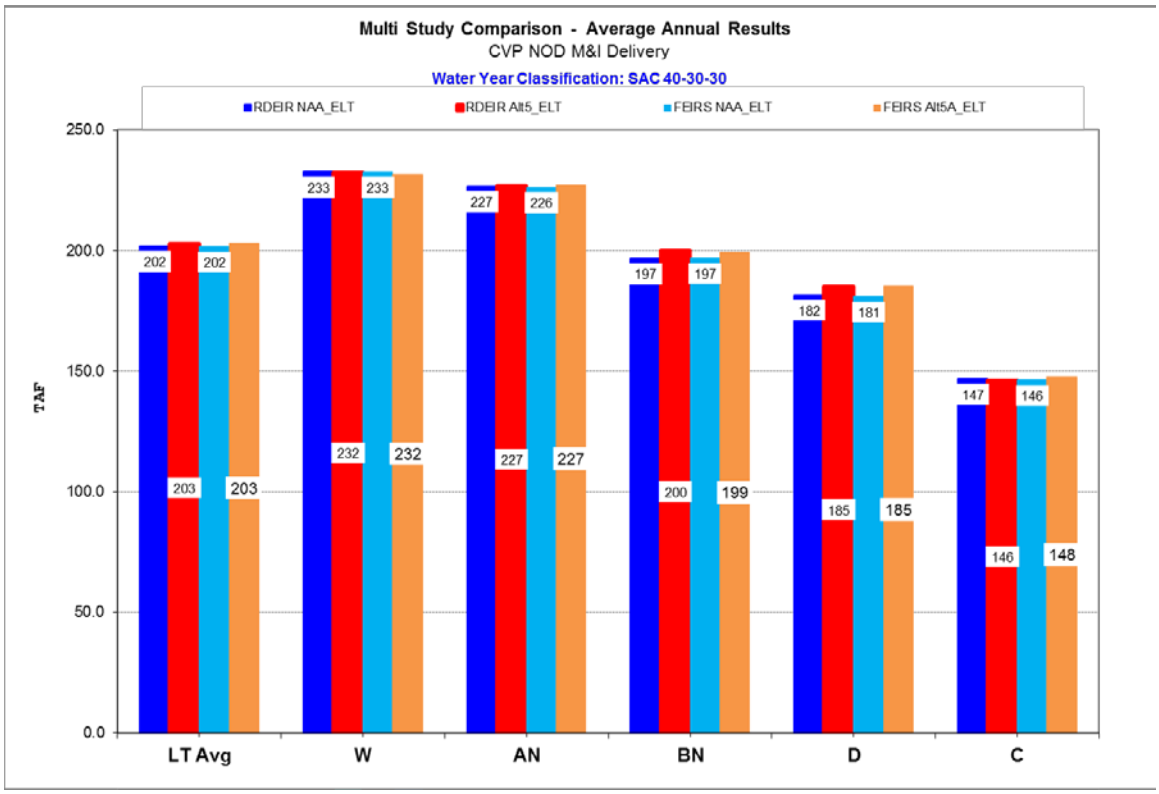

Figure 5F.5-31. Annual (Oct-Sep) CVP North-of-Delta M&I Deliveries (Alt5A ELT)
[WYT per current climate]

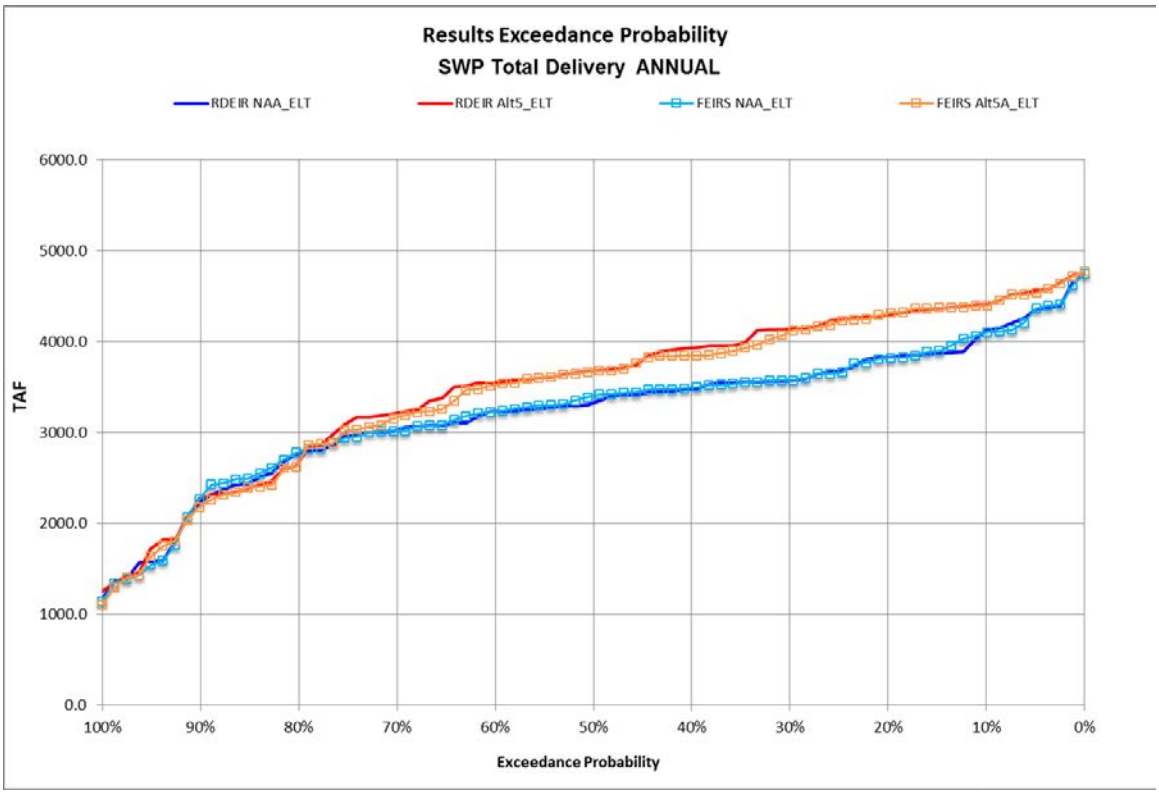

Figure 5F.5-32. Annual (Oct-Sep) SWP Total Deliveries Exceedance Probability (Alt5A ELT)

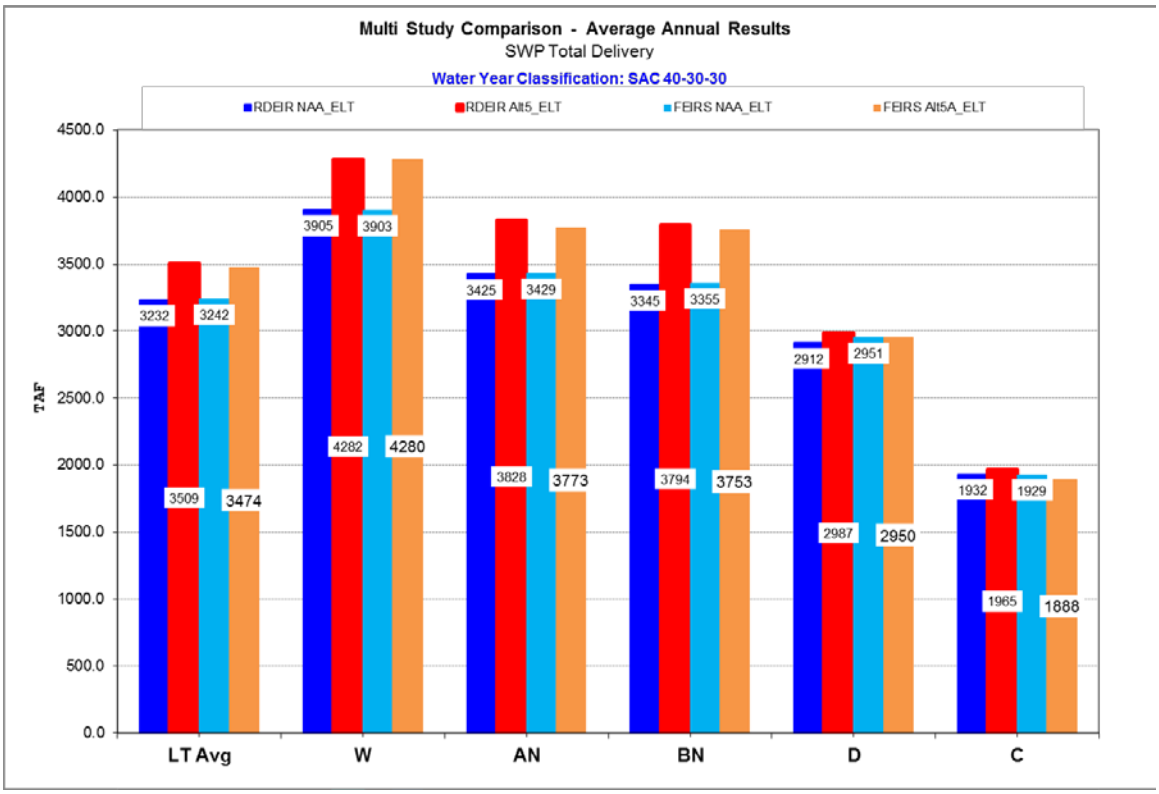

Figure 5F.5-33. Annual (Oct-Sep) SWP Total Deliveries (Alt5A ELT) by WYT *[WYT per current climate]*

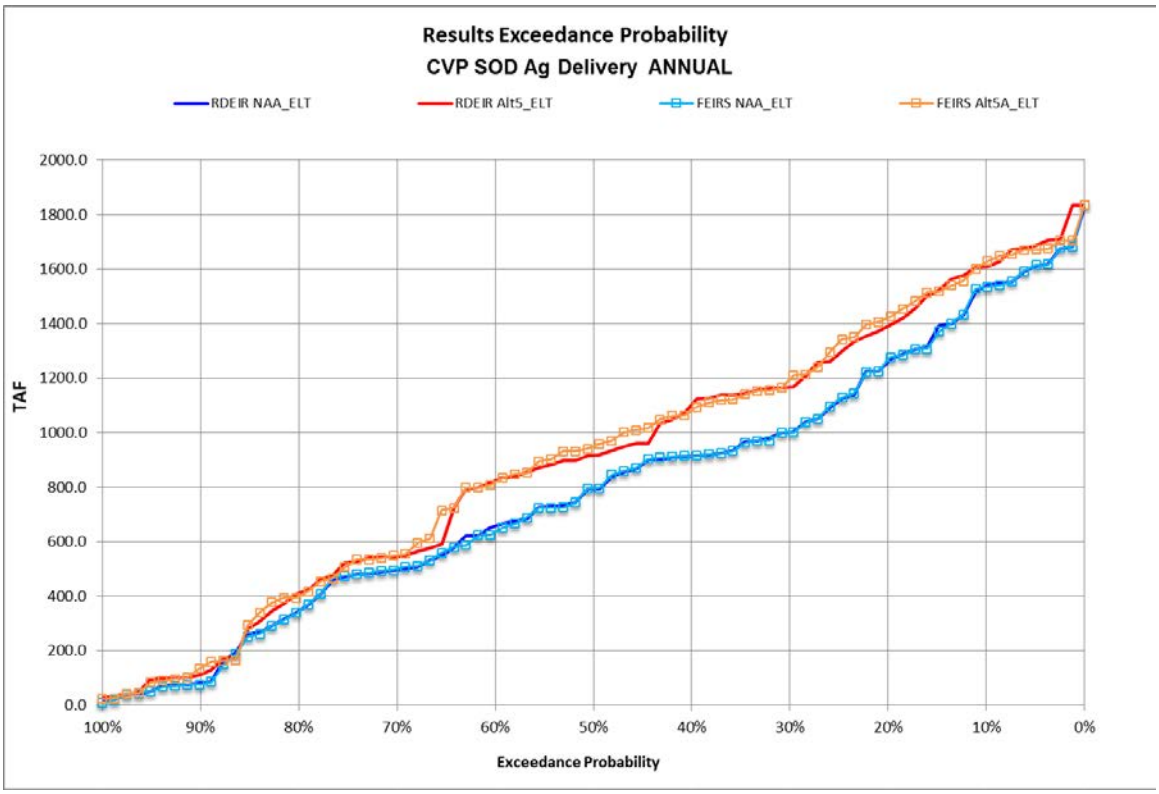

Figure 5F.5-34. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries Exceedance Probability (Alt5A ELT)

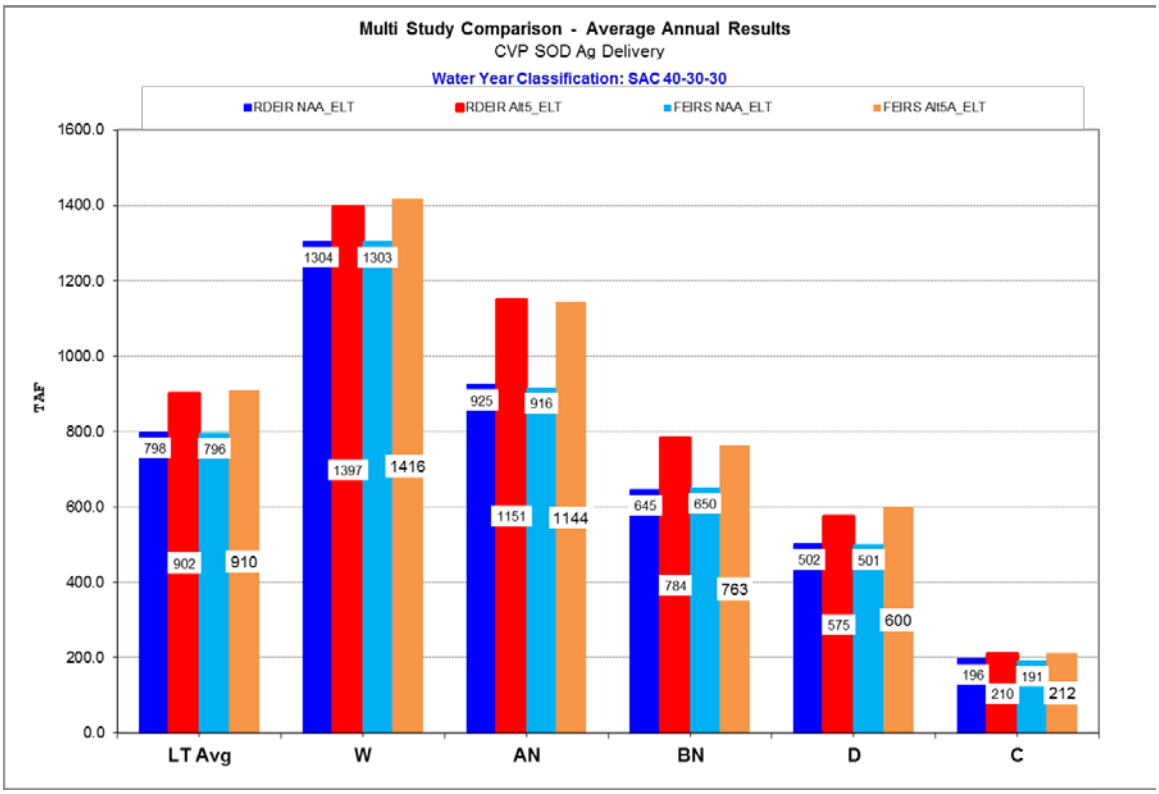

Figure 5F.5-35. Annual (Oct-Sep) CVP South-of-Delta Ag Deliveries by WYT (Alt5A ELT)
[WYT per current climate]

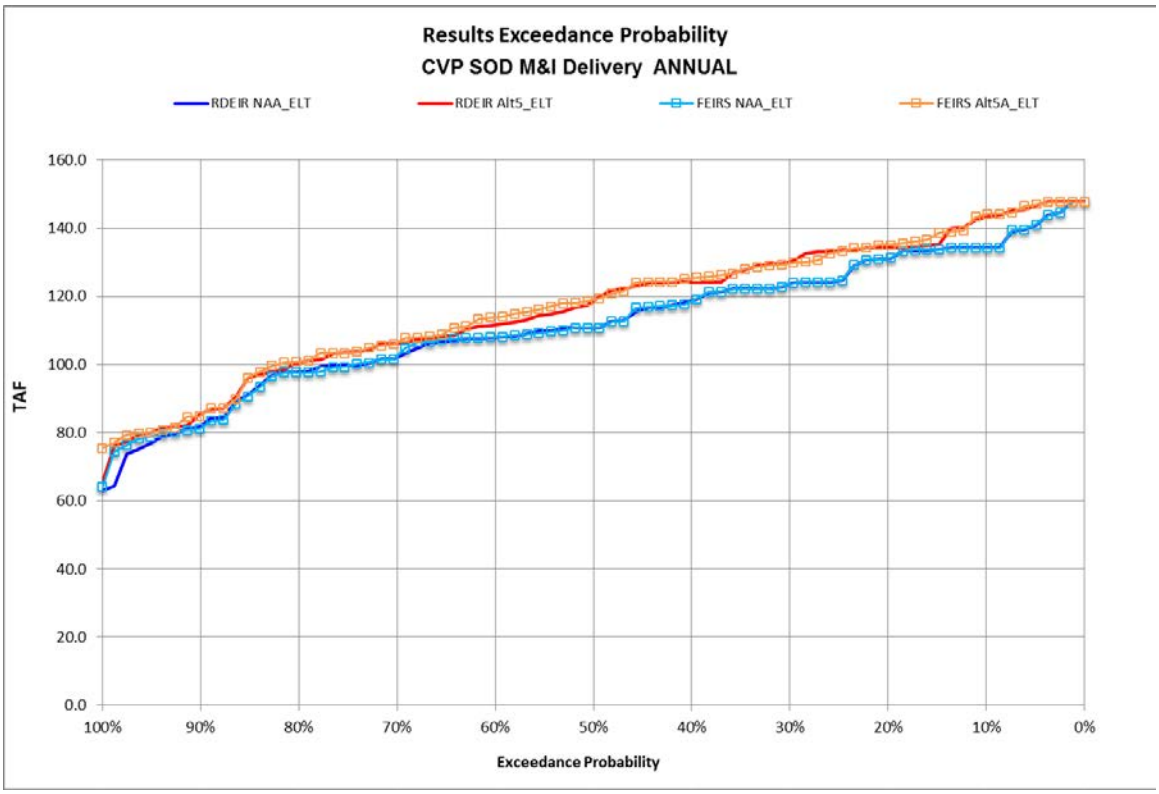

Figure 5F.5-36. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries Exceedance Probability (Alt5A ELT)

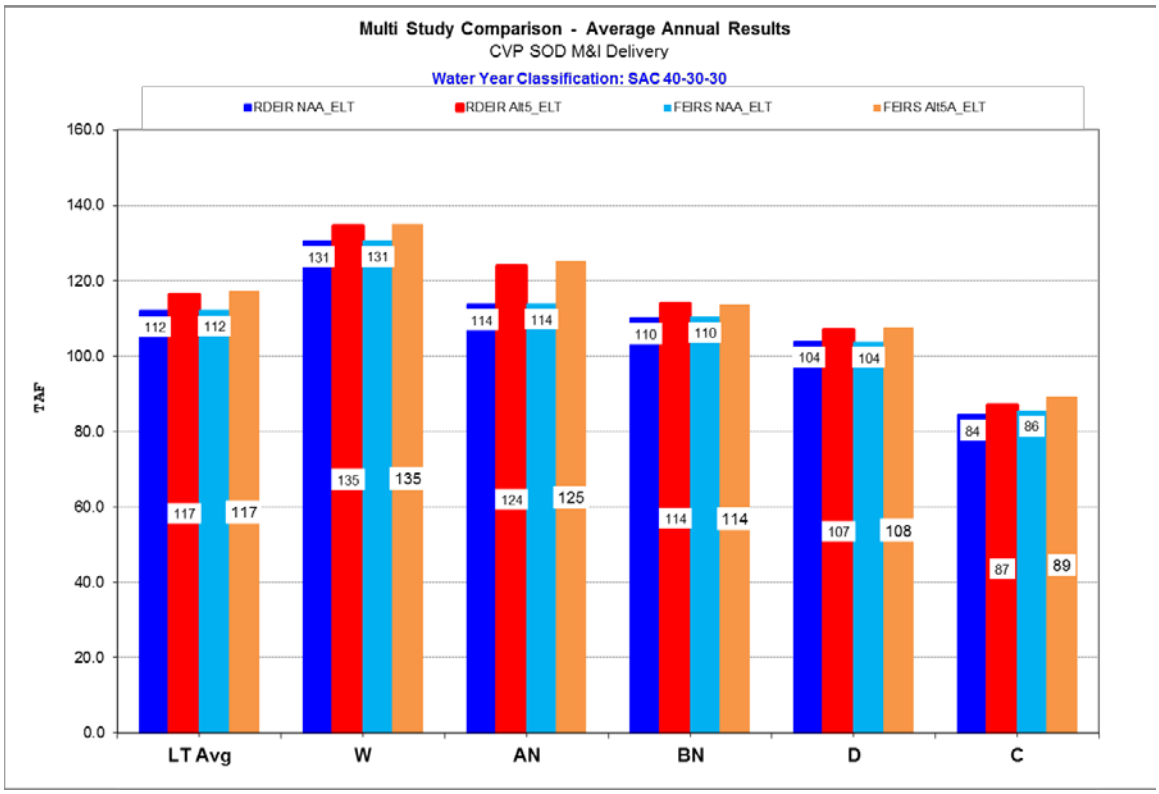

Figure 5F.5-37. Annual (Oct-Sep) CVP South-of-Delta M&I Deliveries (Alt5A ELT)
[WYT per current climate]

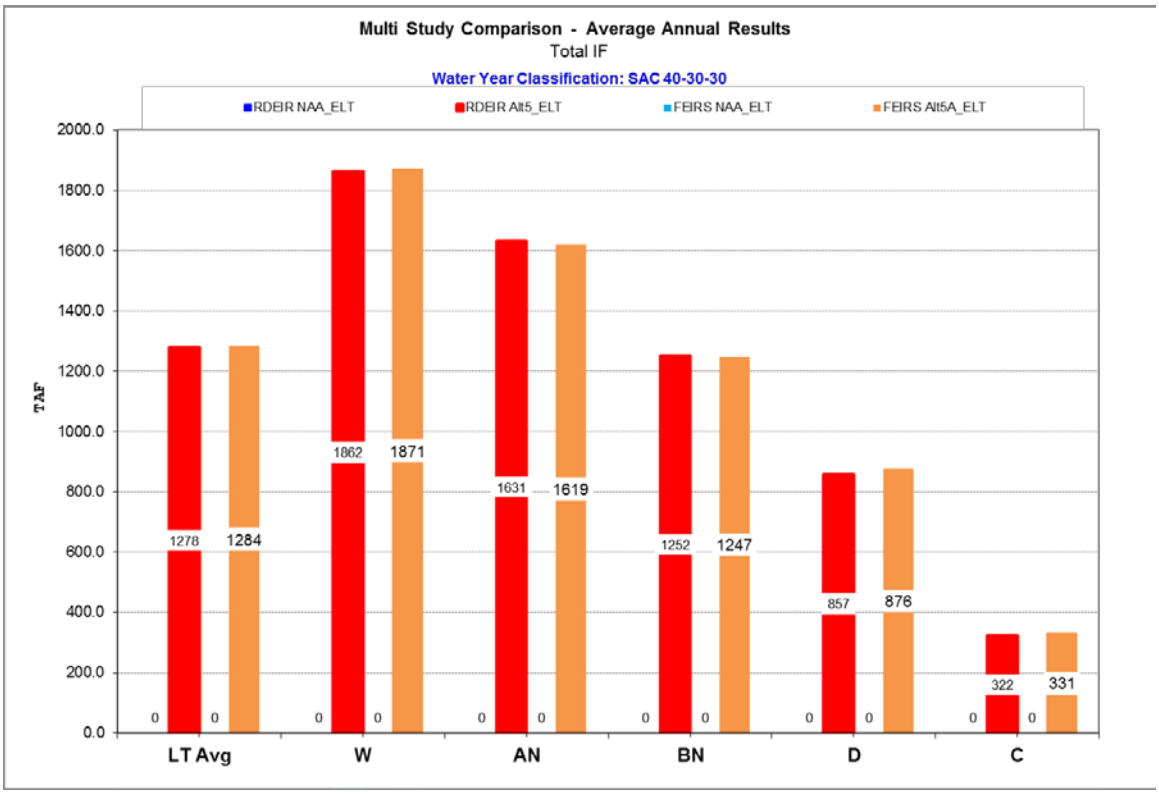

Figure 5F.5-38. Annual (Oct-Sep) Diversion at North Delta Intakes by WYT (Alt5A ELT)
[WYT per current climate]

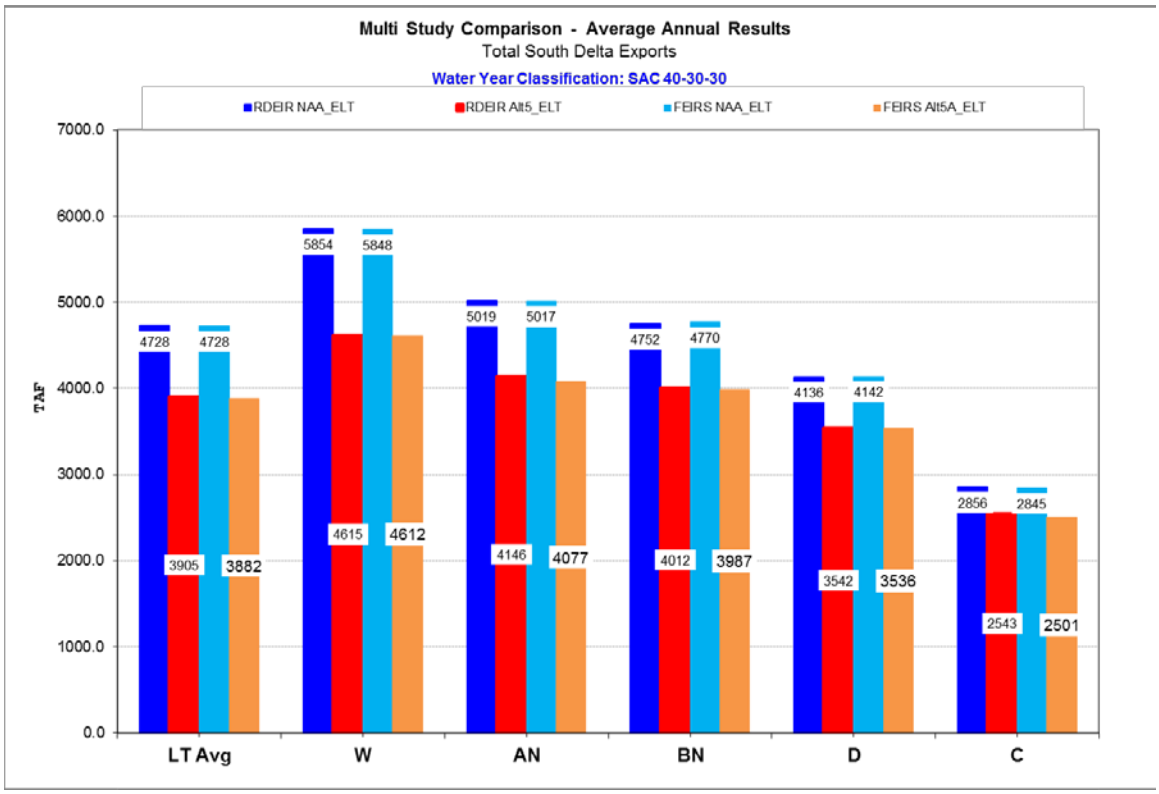

Figure 5F.5-39. Annual (Oct-Sep) Exports at South Delta Intakes by WYT (Alt5A ELT)
[WYT per current climate]

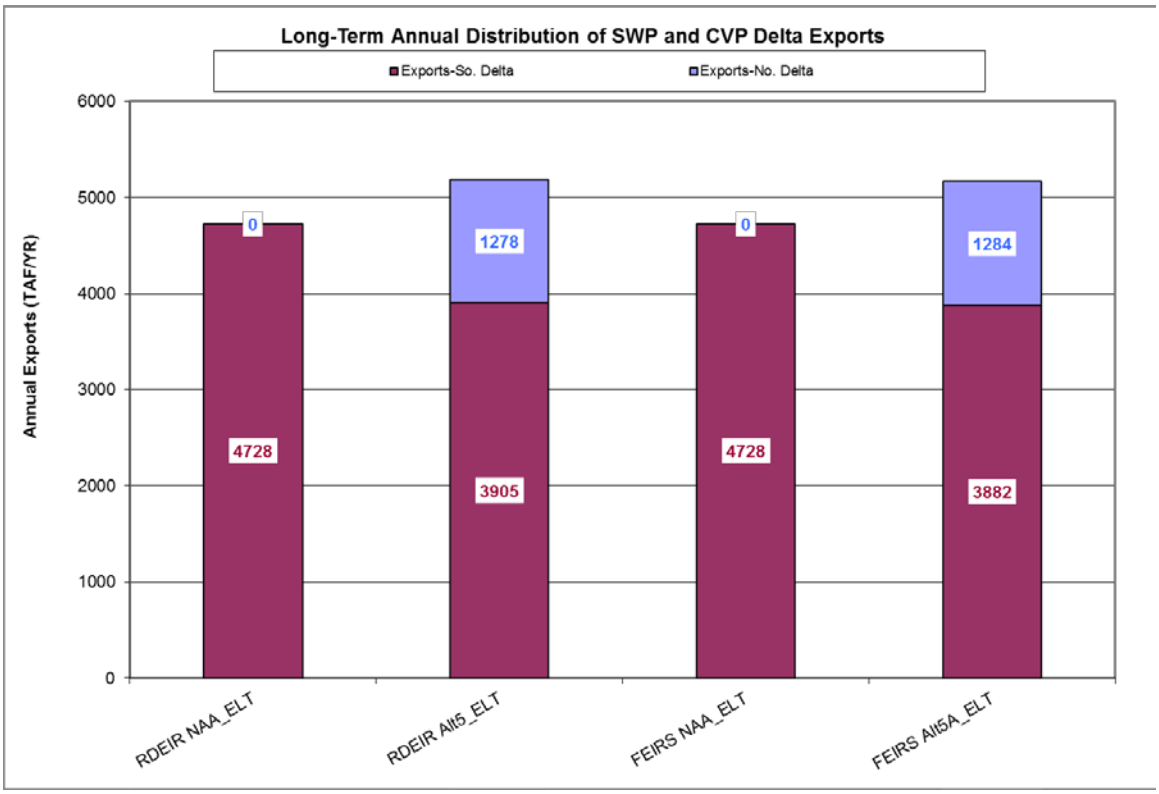

Figure 5F.5-40. Long-term Annual Distribution of Delta Exports at North and South Delta Intakes (Alt5A ELT)