September 6, 2011

Mr. Chad Dibble
Department of Fish and Game
830 S Street
Sacramento, CA 95811
Via Email: cdibble@dfg.ca.gov

SUBJECT: Draft Ecosystem Restoration Program Conservation Strategy

Dear Mr. Dibble:

Glenn-Colusa Irrigation District (GCID) appreciates the Department of Fish and Game (DFG) seeking comments on the subject Draft Ecosystem Restoration Program Conservation Strategy report (ERP). GCID's comments are related to how the report should fulfill DFG's statement of *"coordination between all resource management, conservation, and regulatory actions"*, which is part of the following statement on page 2 of the Introduction:

> The Conservation Strategy serves as an update to the ERP Strategic Plan and follows the principle of a single-blueprint for ecosystem restoration and species recovery in accordance with the principles of ecosystem-based management. Having a single-blueprint is a key ingredient for a successful and effective restoration program. This single-blueprint is the vehicle for ensuring coordination between all resource management, conservation, and regulatory actions affecting the Bay-Delta ecosystem, and it facilitates consistent adaptive management of all restoration activities in the Bay-Delta ecosystem and of the ERP plans themselves.

Background

GCID is located in the heart of the Sacramento Valley and is the largest and one of the oldest diverters of water from the Sacramento River. GCID diverts water from the Sacramento River through its fish screen and pump station into a 65-mile long irrigation canal into a complex system of nearly 1,100 miles of laterals and drains irrigating approximately 141,000 acres of valuable, productive agricultural land. Additionally, GCID delivers water to three wildlife refuges – the Sacramento, Delevan and Colusa National Wildlife Refuges that comprise an additional 20,000 acres of critical wildlife habitat. Farmers within GCID grow such

diverse crops as rice, wheat, tomatoes, cotton, corn, walnuts, almonds and pistachios, which are shipped across the nation and the world. GCID also delivers water in the fall and winter to over 30,000 acres of private farmland which is used for wintering habitat and food for migrating waterfowl and other aquatic and terrestrial species. In an on-going process, GCID performs the *"coordination between all resource management, conservation, and regulatory actions"* within its own boundaries based on both complimentary and sometimes competing resources needs. We appreciate the complex role DFG must assume to essentially balance this coordination effort.

Instream Flow Criteria Report vs. ERP Implementation

As stated on Page 4 of the ERP, the Delta Reform Act of 2009 required the State Water Resources Control Board (SWRCB) to develop flow criteria for the Delta by 2010 and for DFG to develop flow criteria and quantifiable biological objectives for aquatic and terrestrial species of concern in the Delta, also by 2010. In response, DFG prepared its "Quantifiable Biological Objectives and flow criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta."

Aside from the Introduction, the SWRCB and DFG flow criteria reports, or the flows prescribed therein, are not referenced anywhere within the subject ERP. Table 1 states that the Flow Criteria would meet Goals 1-4; however, this ERP would meet all goals identified in the Table. The question must be asked then of what role, if it all, does the Flow Criteria report serve to meet goal of *"coordination between all resource management, conservation, and regulatory actions"*.

To understand what actions DFG will recommend in the future, the ERP should clearly articulate how it intends to utilize the flow reports or how DFG would make recommendations to other agencies, such as the SWRCB. Will DFG be advocating implementation of the ERP or the flow criteria reports, or both?

Based on GCID's in-depth review of the ERP, it is in-fact an effort to address the *"coordination between all resource management, conservation, and regulatory actions"* while looking at the delta and watershed as a whole and at aquatic and terrestrial species that rely upon these regions as well. As stated by the SWRCB, the flow reports assumed there was no balancing or "coordination" among public trust resources and that the delta and its fisheries would be "restored" at the potential expense and eradication of resources in regions outside the delta. The ERP should clearly articulate this difference and DFG should adopt a policy that states how it intends to proceed with implementation of restoration activities.

Section 2: Sacramento Valley Region

Since GCID is located within the Sacramento Valley region, we have limited our comments to this section of the ERP as follows:

1. Some of the information in this section appears dated and does not reflect the current operations or status of species in the Valley. The Northern California Water Association is submitting comments prepared by biologist David Vogel which provides a list of corrections and deficiencies the Report should address.
2. In Section VII, Stage 2 Actions, the ERP provides flow, hydrodynamic, floodplain and habitat recommendations. As stated in the above section, the ERP does not mention or reference the Flow Criteria reports or the flow recommendations included therein. Certainly, the flows recommended in Section 2 of the ERP are significantly less than those within the Flow Criteria and appear to provide for the coordination of resources. The attached charts show that if the Flow Criteria report were implemented Shasta Reservoir storage in September would reach dead pool in close to 60% of all years. Even in years when storage is above minimum, it would be impossible to satisfy upper Sacramento River temperature objectives in almost every year as recommended in the ERP. It may be possible to meet temperature objectives in less than 10% of years; however, reductions in Keswick release from June through November will cause increased warming making it more difficult to meet objectives.
3. In Section VII, Stage 2 Actions, the ERP states that agricultural lands should be managed to provide wildlife values. Similar to above, the Flow Criteria report recommendations would result in catastrophic impacts to water supply availability to keep ag lands in production. The attached charts show that if the Flow Criteria report were implemented the impact to Sacramento valley water supply would be approximately 1.7 million acre-feet annually and groundwater pumping would be significant in order to replace lost supply, or alternatively, wide scale land fallowing would occur in the valley. The ERP should provide some context to this issue.

GCID appreciates the opportunity to provide comments. If you have further questions or would like to meet to discuss our comments in more detail, please contact me at (530) 934-8881.

Sincerely,

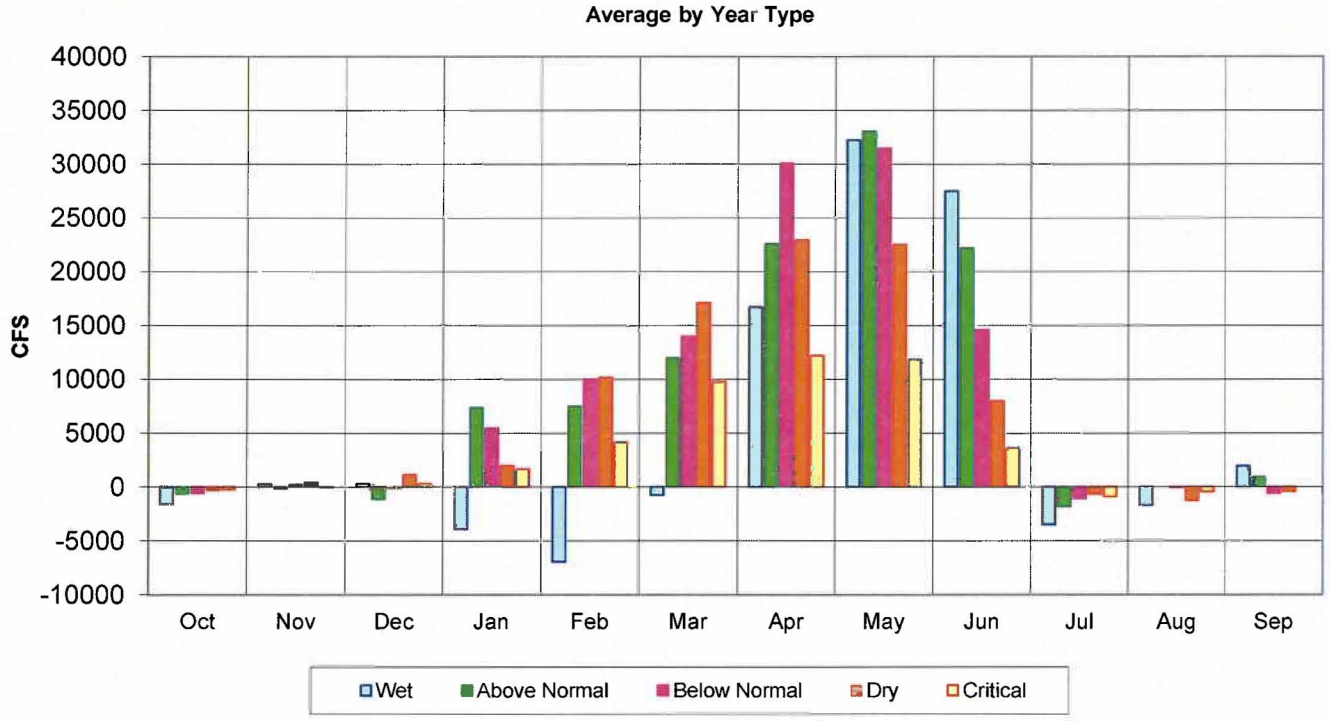
Thaddeus L. Bettner, PE
General Manager

These changes are due to SWRCB / DFG Delta flow criteria.

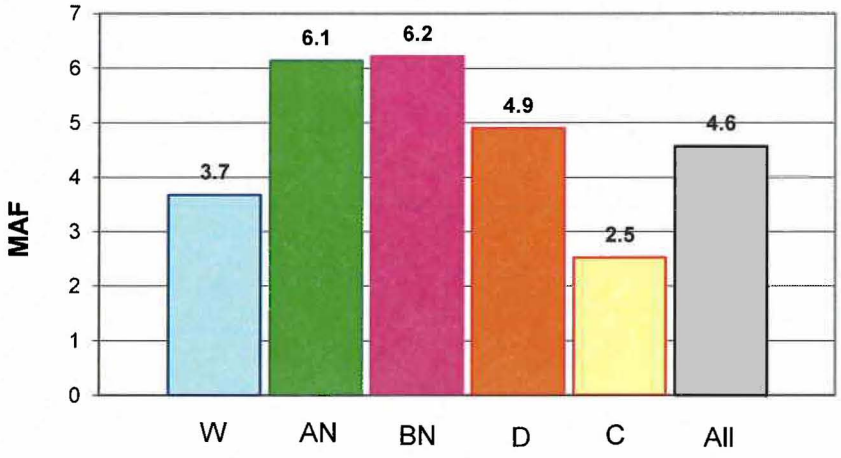
Vernalis - 60% of unimpaired from February through June
Delta Outflow - 75% of unimpaired from January through June
Sac. River at Rio Vista - 75% of unimpaired from November through June – this requirement was modeled as 75% of unimpaired Sacramento River at Hood plus Yolo Bypass flow into the Delta. This is a more conservative (less water cost) than is modeled at Rio Vista.

Total Sac Basin water supply impact is 900+800 = 1.7 MAF
Change in Export = 2.8 MAF
Change in Vernalis flow = 0.8 MAF
Total = 5.3 MAF

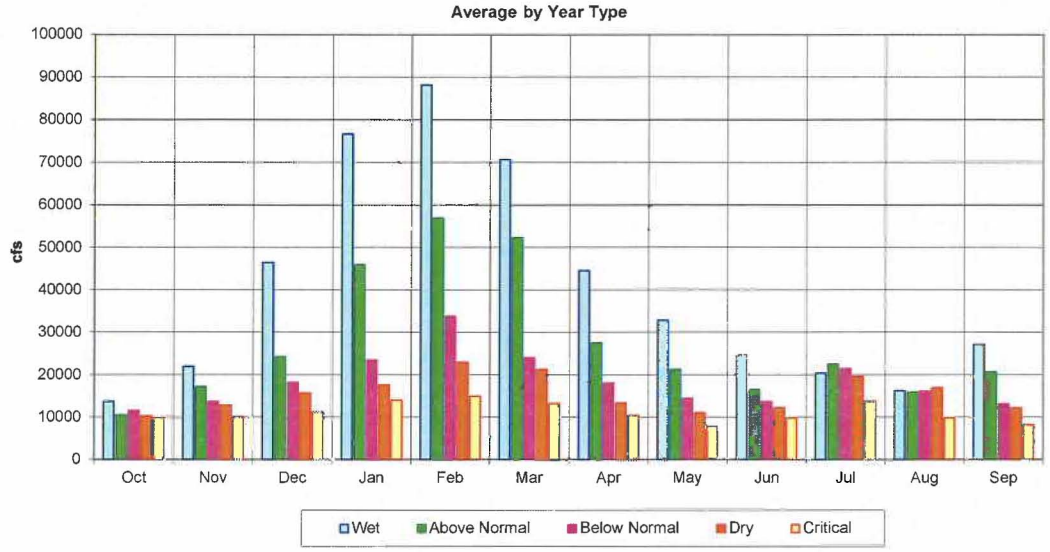
Change in Delta outflow



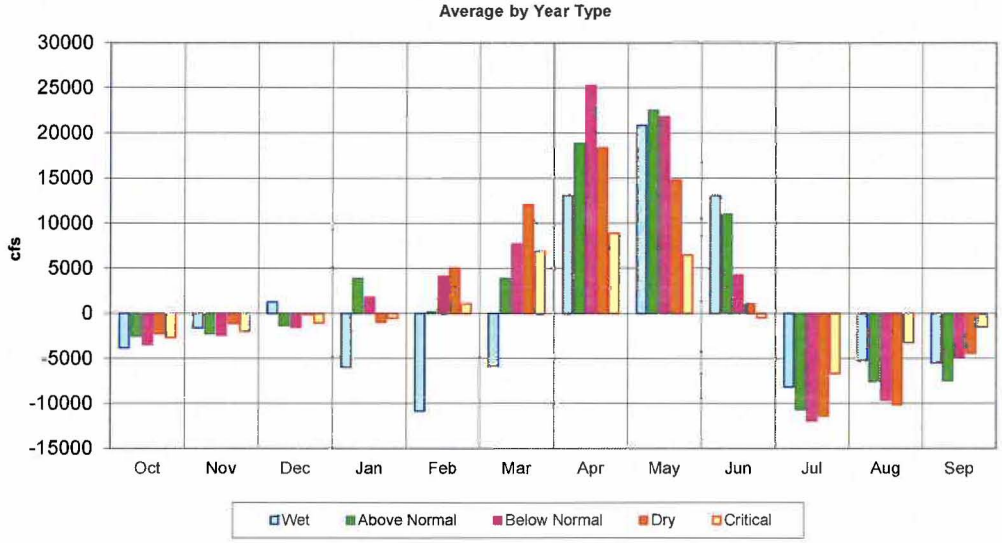
Annual change in Delta outflow



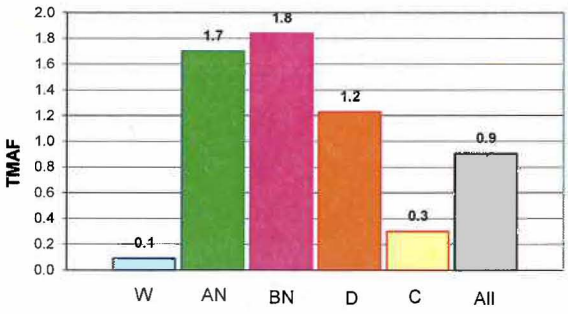
Sac R plus Yolo BYPS inflow to Delta



Change in Sac R plus Yolo BYPS inflow to Delta

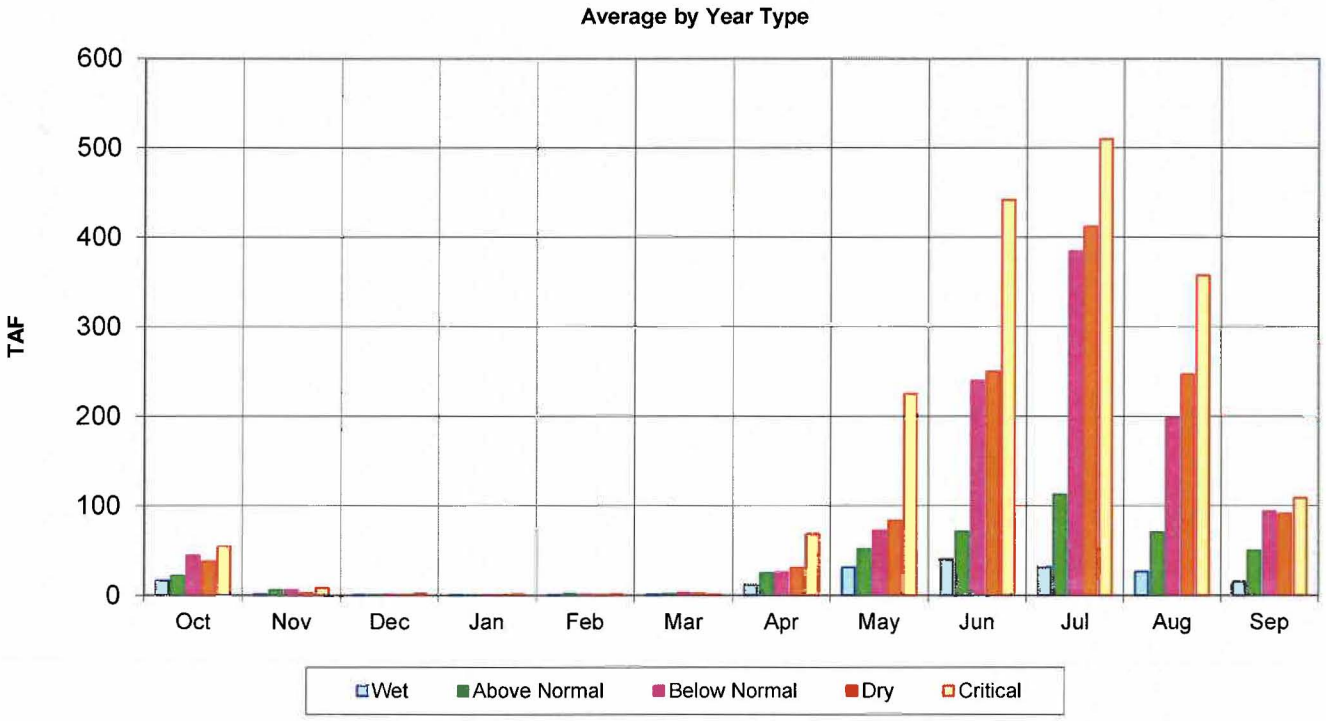


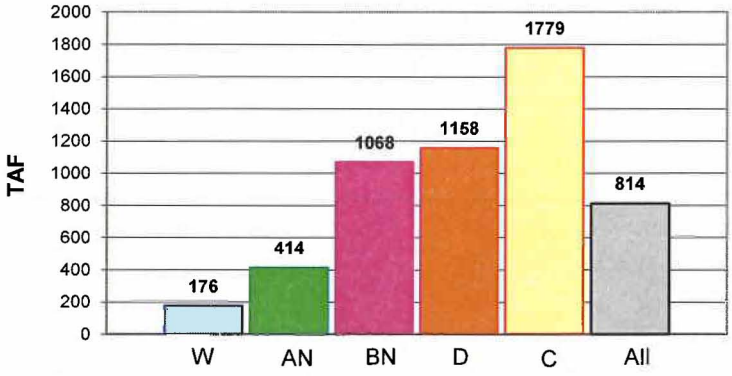
Annual Change in Sac R plus Yolo BYPS inflow to Delta (MAF)



Change in GW pumping in Sac V
Existing pumping according to CalSim (very rough) = 2.385 MAF
Pumping with SWRCB flow criteria = 3.198 MAF

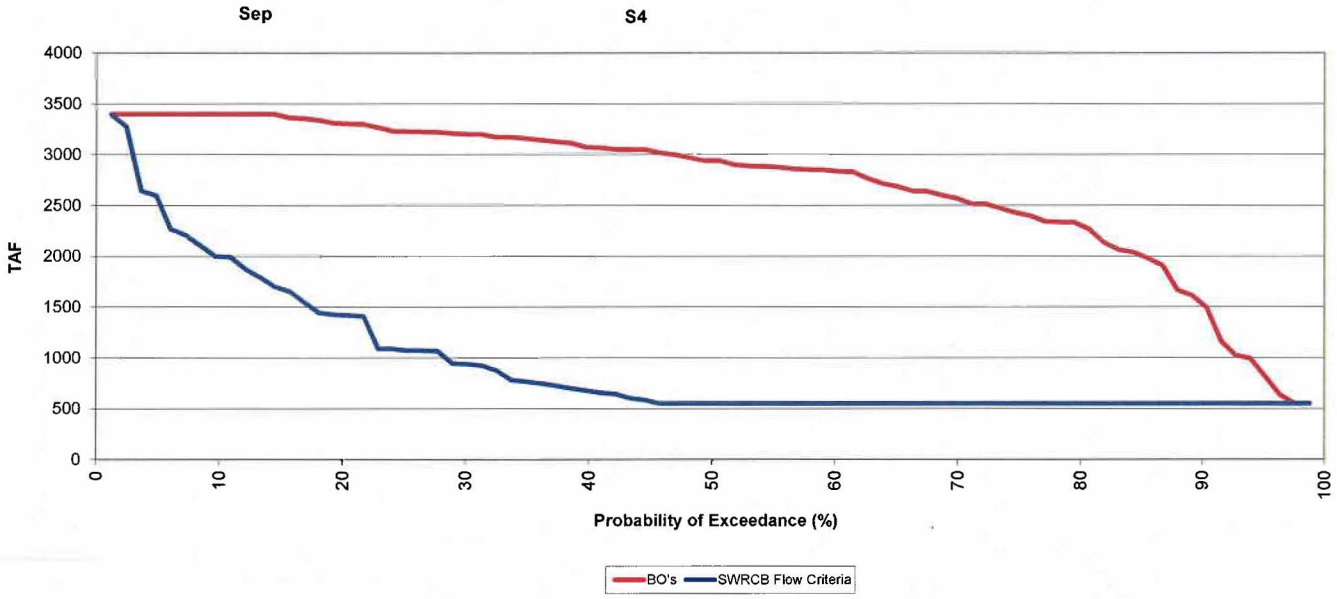
This level of increased pumping is not physically possible. Although the model will increase groundwater pumping to satisfy all demands, there would most likely be a reduction in crop acreage and refuge water supply.



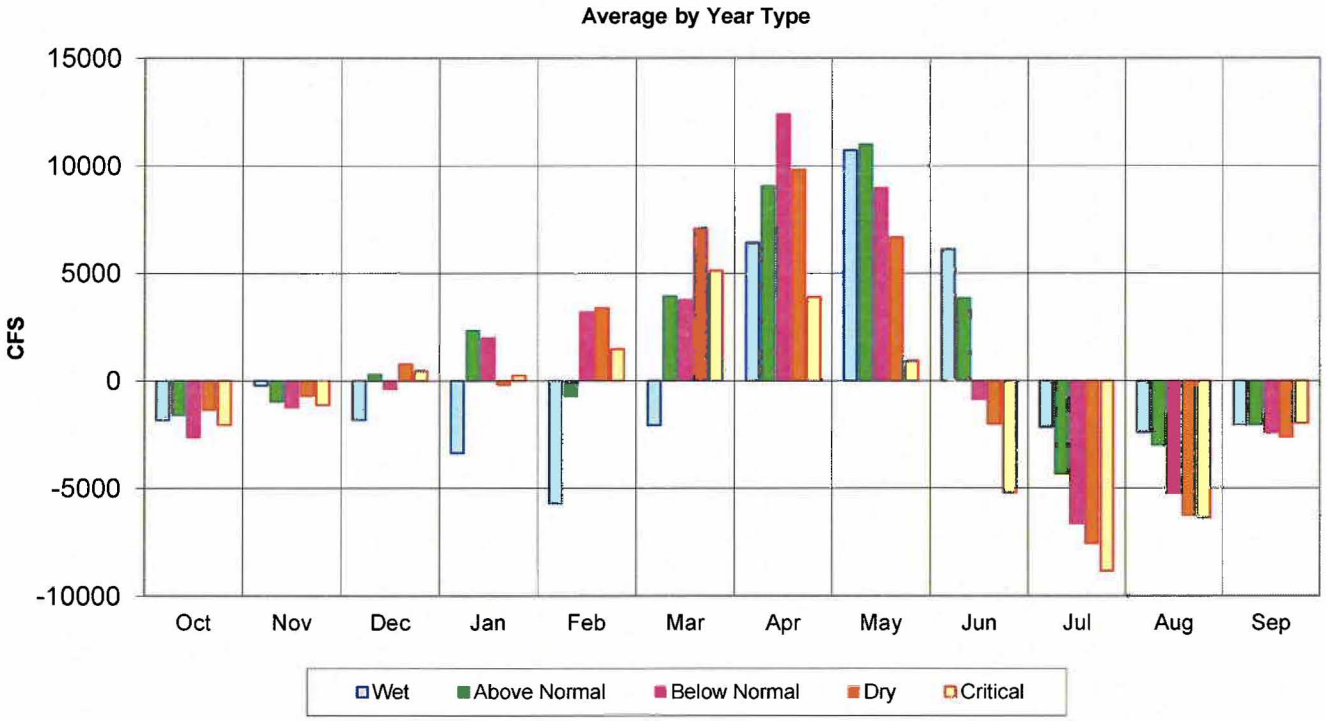


End of September Shasta Storage

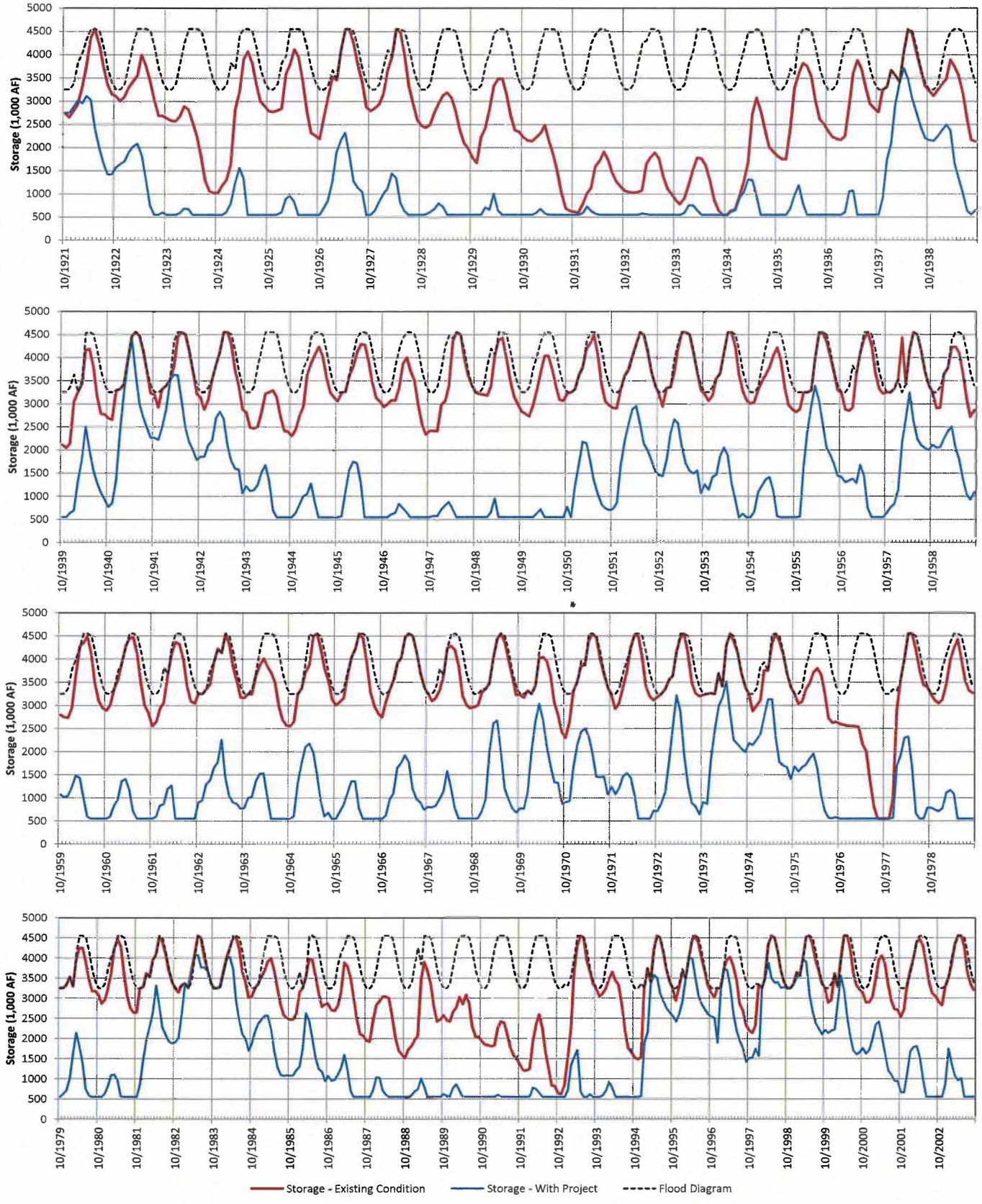
Shasta storage would het dead pool in close to 60% of all years. Even in years when storage is above minimum it would be impossible to satisfy upper Sacramento River temperature objectives in almost every year. It may be possible to meet temperature objectives in less than 10% of years; however reductions in Keswick release from June through November will cause increased warming making it more difficult to meet objectives.



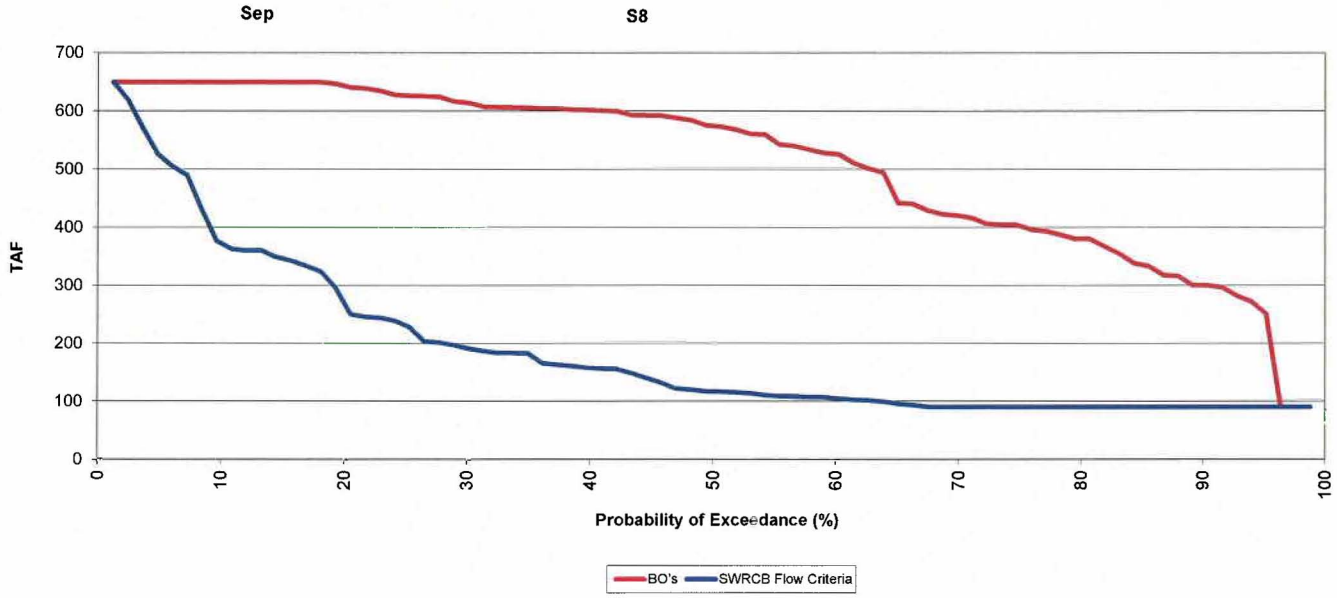
Change in Keswick Release



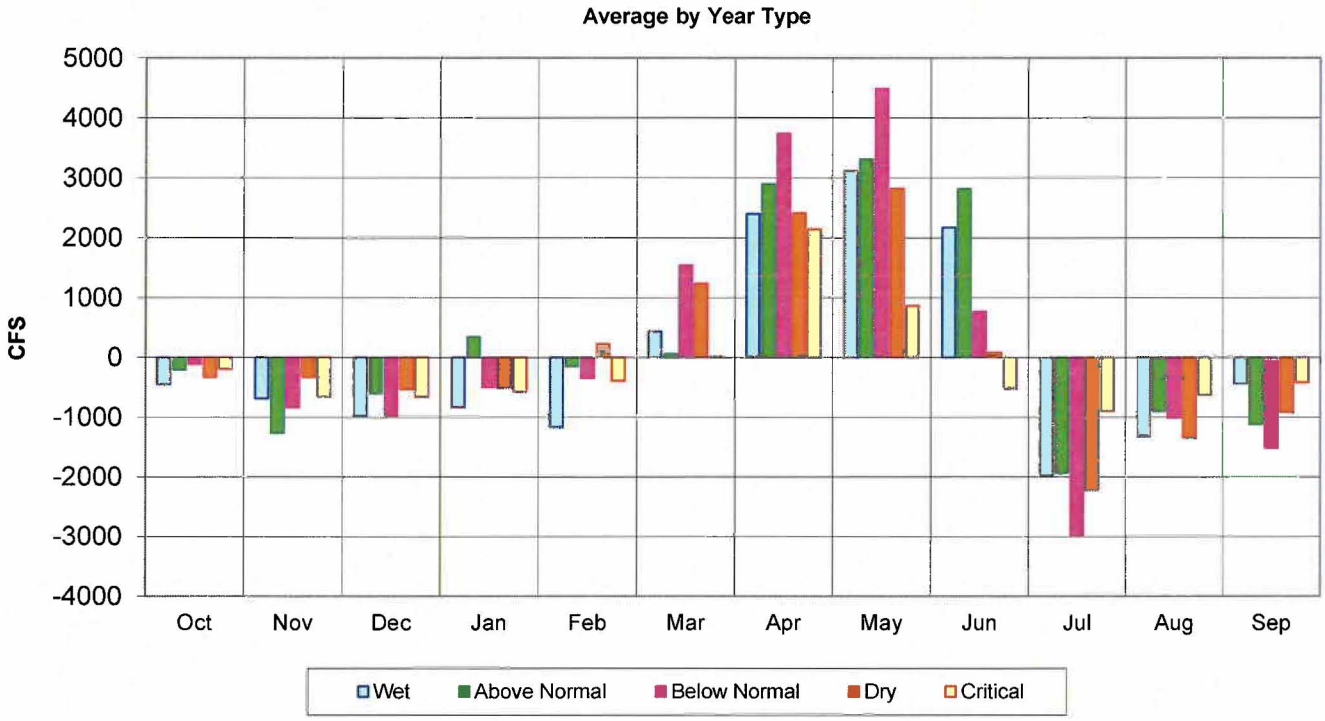
Shasta Storage



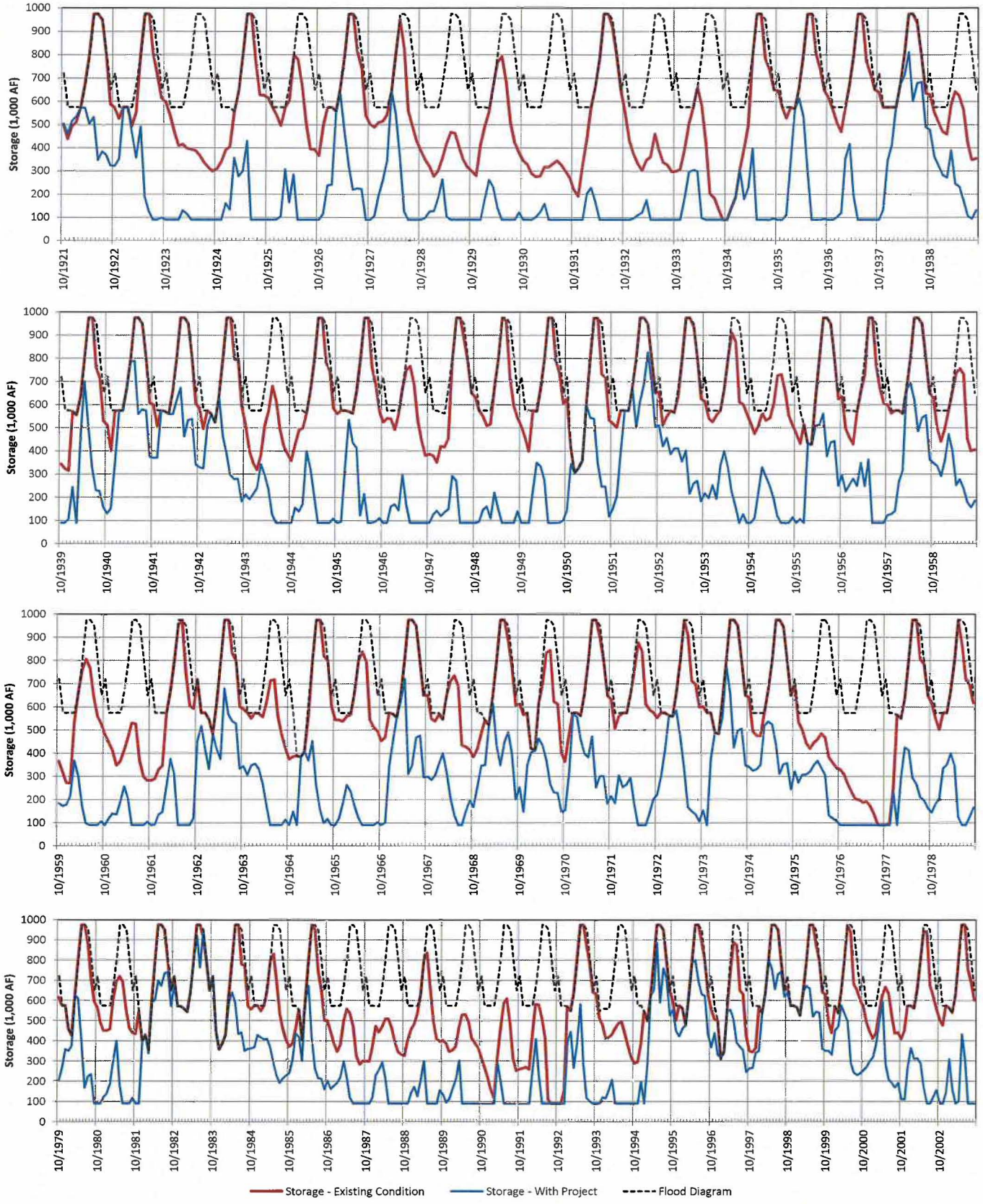
Folsom Storage



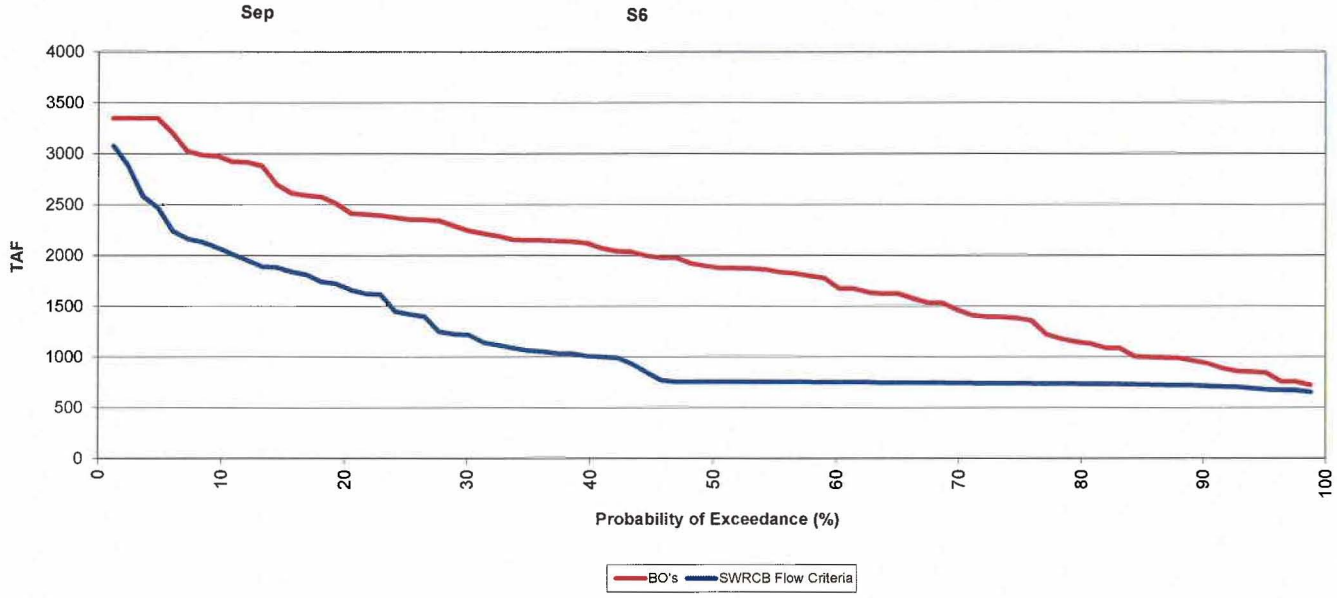
Change in American River flow below Nimbus



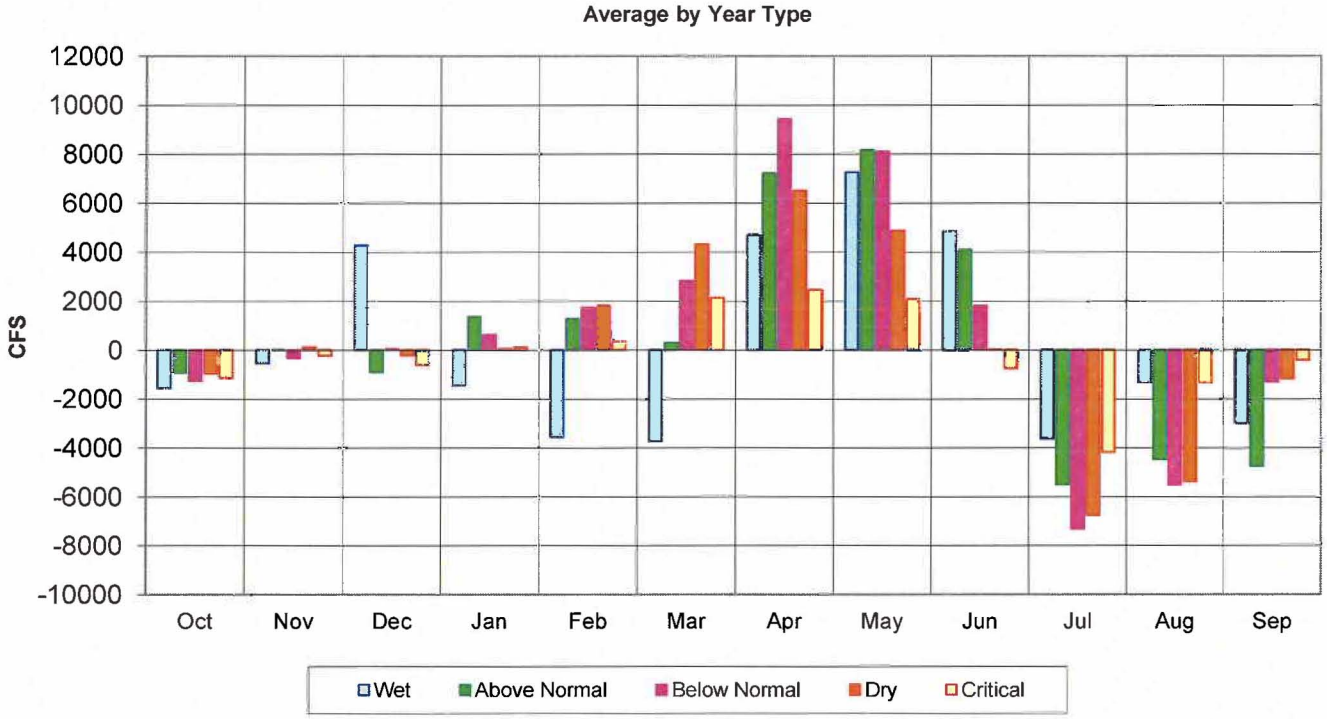
Folsom Storage



Oroville storage



Feather River below Therm return



Oroville storage