Water Control Manual (WCM) Revisions – Downstream Perspective (10/14/2025)

For more than a year, a team of people living downstream, including a number of OCAC Commissioners, have been seeking information from the USACE, the DWR and the Forecast Informed Reservoir Operation (FIRO) team about the existing 1970 WCM and the multi-year process that is underway to revise it. We have learned a lot about reservoir control, levees, the forecasting of precipitation and snowmelt and the estimation of snow and ground moisture content. We appreciate the cooperation of those agencies with which we have been in contact.

The most important thing we have learned is that the reservoir can be operated so that there is negligible risk of releases exceeding 150,000 fps and of serious flooding from a 500-year storm which was the unfulfilled aim of the 1970 WCM.

The final results of the Feather Yuba FIRO study were released earlier this year. Over the past few years, the FIRO methodology has resulted in some 30% more water being available from the Mendocino Dam and has worked well at the Folsom Dam. FIRO uses the best available science to determine appropriate reservoir starting elevation and early releases. Forecasting of storms becomes more accurate year by year.

The Oroville FIRO Study, which assumed that early leases would not empty the reservoir below 833 ft, demonstrated that water storage could be increased with negligible risk of releases exceeding 150,000cfs during storms up to about the 150-year standard. We have been told that hydrologic studies showed that, if the 833 ft level constraint on lowering the reservoir is removed so that the reservoir is emptied to 813 ft (the elevation of the bottom of the gates), there would be protection against a 500-year storm with releases not exceeding 150,000 fps when the reservoir starting elevation is 860 ft. Such extreme storms are rare and in those years in almost all circumstances the reservoir will be full in April.

This raises the question as to whether the WCM will:

- Require early releases down to 813' when extreme storms are forecast
- Establish the reservoir starting elevation no higher than 860' or whatever level is indicated scientifically to provide 500-year storm protection.

There are a number of other concerns relating to the revision of the WCM but, if the answers to these questions are affirmative, many will become irrelevant.

We are not expecting the downstream communities to be completely protected from flooding in extreme storms. Releases of 150,000 cfs, the maximum established for the 1970 WCM, will cause flooding. But we are expecting that the WCM will eliminate the risk of inundation and out of control releases which have occurred in the past.

The original WCM objective and the duty of care suggest that the WCM revisions should include all the measures necessary to provide 500-year flood protection at a time when changes in the climate are increasing the likelihood and severity of storms.

Commissioner Bill Connelly
Commissioner Tod Kimmelshue
Commissioner Robert Bateman
Kevin Zeitler, Chairman ORAC
Angie Mannel, Emergency Manager, Butte County
Dick Thompson, Chairman Feather River Recovery Alliance
Erik Johansen, Director Feather River Recovery Alliance

See <u>www.notjustaspillway</u> for background information also the OCAC website.