

California Department of Water Resources

April 2, 1997

Mr. William Kahrl
Op-ed Page Editor
Sacramento Bee
2100 Q Street
Sacramento, California 95816-6899

Dear Mr. Kahrl:

I would like to correct some misconceptions in a March 23 article written by Patrick Porgans, a frequent critic of the Department of Water Resources. Contrary to his insinuations, DWR safely and properly operated Oroville Dam for flood control during the January storms, to the benefit of people and property downstream. Here are five key points:

First---Though the historic floods of January 1997 caused great hardship to some communities, without dams the amount of flooding in the Sacramento Valley would have been much greater. California's dams and reservoirs helped prevent billions in flood damages to property.

In a three-day period at the peak of the storms, DWR's Lake Oroville accommodated 1.25 million acre-feet of runoff, an amount equivalent to more than one-third of the lake's total capacity. That storm series generated a peak inflow exceeding 300,000 cubic feet per second. Without the dam to control it, this amount of water would have caused tremendous flooding downstream. This record runoff was reduced to a maximum discharge of 160,000 cfs and that only for nine hours.

It's not certain whether flows actually exceeded 300,000 cfs in the Feather River below the confluence with the Yuba River. A vital point is that the Feather River levee near Arboga did not break from overtopping. The river level at that time had approximately four feet of freeboard.

Second---At the beginning of the major storm in late December, Lake Oroville was not encroached into flood control space. On December 26, when our meteorologist first forecast heavy rains, Lake Oroville was well below the flood control encroachment levels. We increased releases substantially on December 28 as heavier storms approached, adding an additional 130,000 acre-feet of buffer to the 750,000 af of required flood control space. We did not fill to the lower limit of the flood control reservation until the morning of December 31, when releases were increased prudently, eventually reaching 160,000 cfs later on January 1.

During New Year's Day, official weather forecasts predicted an even higher rate of inflow. This would have resulted in use of the emergency spillway at Oroville Dam. Fortunately, the actual rainfall was less than predicted.

Third---Oroville Dam operation decisions were made in consultation with water managers from the Yuba County Water Agency, owners of New Bullards Bar Reservoir and the U.S. Army Corps of Engineers, based on the best information then available.

Fourth---Some folks criticize the multipurpose design and function of dams. Most large foothill reservoirs are multipurpose reservoirs designed to provide water storage, electric power, flood control, recreation, water quality and downstream fishery needs. These large reservoirs would not exist as single-purpose projects. They would never get built for just one purpose. The cost would be too great.

Benefits from a multipurpose design maximize the cost-effective potential of each use. When the large dams were designed, a formula was developed which provides for flood protection during winter months and increased water storage in other months to get the best all-purpose use of the reservoir.

Fifth---The U.S. Army Corps of Engineers set the criteria for operation of Oroville for flood control purposes. The Corps purchased flood control space as part of the multipurpose project. Operational rules set by the Corps guide how the temporary encroachment and accompanying flood control releases are handled.

The amount of flood control space in our reservoirs as specified by the Corps was based on analysis of the biggest storms known to have occurred during the period of record. For most of this century, storms and runoff stayed pretty much within those expectations. In the last decade or so storms seem to have been bigger---severely testing river and levee channel capacities.

Looking to the future, the Flood Emergency Action Team, appointed by the Governor to study the 1997 floods and develop recommendations for future flood control, is scheduled to issue a report on May 10. The Team has obtained input from flood area residents, local officials and flood control experts. I believe this report will help shape public policy on the larger issues of flood control for California's Central Valley.

Sincerely,

David N. Kennedy
Director

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