

STUDY OF THE IMPACT OF HIGH RELEASES FROM OROVILLE DAM

In July, four weeks before the Oroville Dam Citizens' Advisory Commission meeting on August 27th, the FRRRA asked that a study of the Impact of High Releases from the Oroville Dam proposed by Dr. Rune Storesund be put on the meeting Agenda so that it could be endorsed and the DWR asked to co-operate. We have been told that this will be included on the December meeting. The standard project flood would result in releases of 183,000 cfs.

Question for Commissioners Impacts to Public Safety from Oroville Dam Releases

At the May meeting, Dr. Rune Storesund suggested that Commissioners should have information about the impact of expected dangerous events such as releases from the Dam between 150,000 cfs and 650,000 cfs. Since then, he has developed a proposal for a study of higher releases from the Dam. This study is moving forward.

Will the Citizens' Advisory Commission endorse this study and then ask the DWR, which referred him to the Commission, to assist, particularly in sharing their modelling?

There is no record of such a study having been completed although this information is normally required before a large dam is licensed. The information provided is critical to the operation of the reservoir as well as levee design and evacuation planning in at least 6 counties. With climate change driving extreme storms, releases in this range can be anticipated in future unless there is careful planning.

Dr. Storesund has provided the following brief summary of the project design. It is expected that the study will be completed by mid 2022. He has also provided the attached description of the statewide ARkStorm 2.0 project originally led by the USGS with which the high release study will be co-ordinated.

Robert Bateman
Secretary Feather River Recovery Alliance
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Impacts to Public Safety and Evacuation Planning in Butte, Glenn, Colusa, Yuba, and Sutter Counties, California Draft

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Emergency Action Plans are required to be developed and submitted to FERC as part of licensing requirements established in the [Code of Federal Regulations Title 18, Chapter 12 "Safety of Water Power Projects and Project Works."](#) These plans must be "[Designed to provide early warning to upstream and downstream inhabitants, property owners, operators of water-related facilities, recreational users, and other persons in the vicinity who might be affected by a project](#)

emergency.” An emergency is defined as: Project emergency means an impending or actual sudden release of water at the project caused by natural disaster, accident, or failure of project works.

Oroville Dam was designed to release a maximum of approximately 650,000 cfs through the primary spillway (capacity of about 300,000 cfs) as well as additional releases through the emergency spillway (capacity of about 350,000 cfs). No emergency response information currently exists to inform first responders within the impacted areas for discharges greater than the routine discharge of 150,000 cfs.

This study, in collaboration with the Department of Water Resources (DWR), will leverage existing modeling completed for the full-breach of Oroville Dam to calculate and map inundation associated with discharges between 150,000 cfs and 650,000 cfs (at 50,000 cfs increments and at hourly timesteps) to inform emergency response personnel as to vulnerable areas (based on discharge) and serve as the foundation to develop release-specific emergency warning and evacuation plans to ensure public safety.

This study will coordinate with ArkStorm II, which considers a plausible extreme precipitation event