

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
OROVILLE DAM SAFETY
COMPREHENSIVE NEEDS ASSESSMENT

Lake Oroville Flood Risk Reduction

Oroville Dam Safety – Ad Hoc Committee Meeting No. 3

January 10, 2019

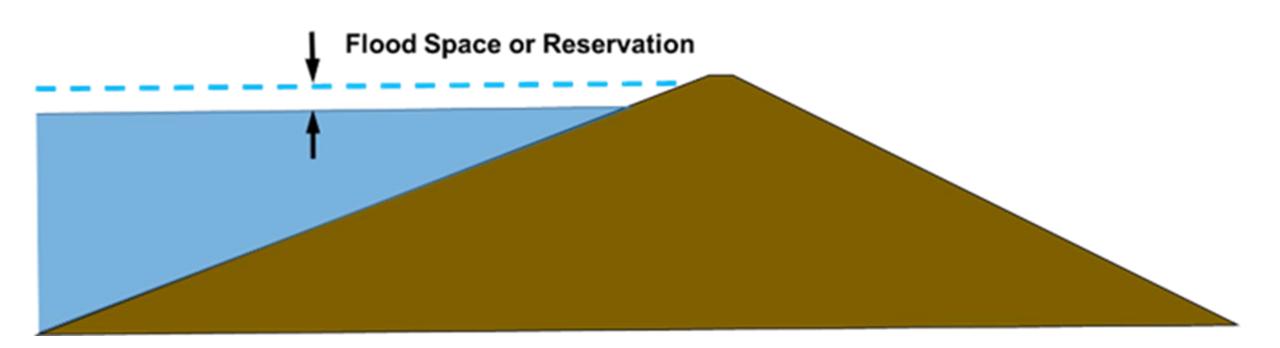


Overview

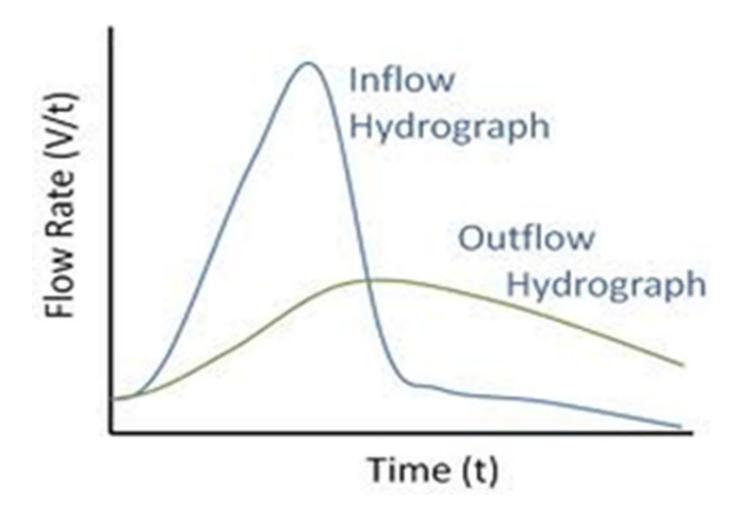
- Flood Risk Reduction
 - Flood Reservation
 - Flood Flow Attenuation
 - Historical Floods
- Design Floods
 - Standard Project Flood (Downstream Protection)
 - Probable Maximum Flood (Dam Protection)

Outlet Portals -

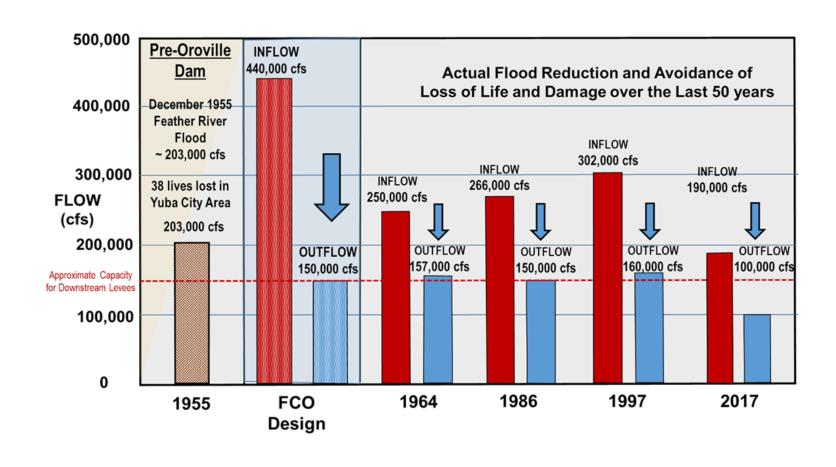
Flood Reservation



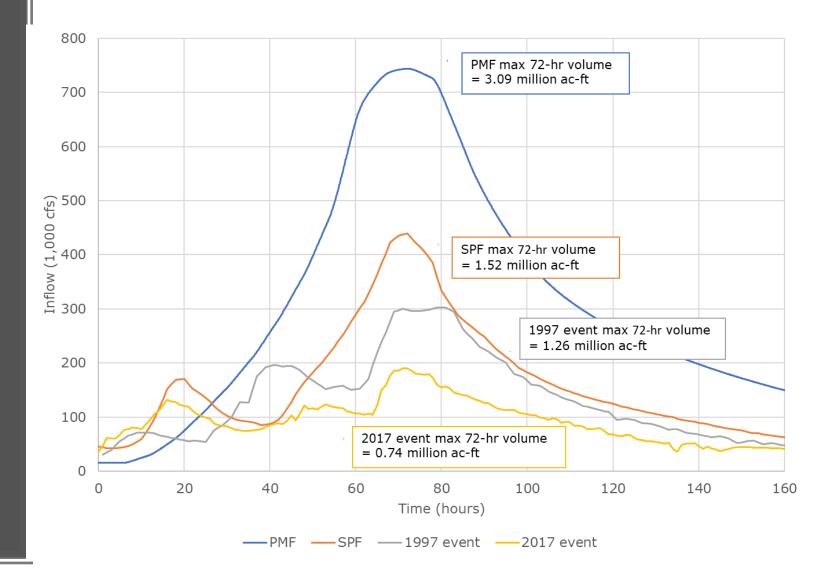
Flood Flow Attenuation



Historical Floods



3-day Hydrograph Comparisons





Design Flood Events

- Standard Project Flood
 - USACE Flood Reservation based on this event
 - Recurrence interval of between 200-500 years
 - Slight chance of occurring over the lifetime of facility
 - Dam operations designed to greatly reduce flow rates on downstream levees and to stay within channel capacity
- Probable (Improbable) Maximum Flood
 - Worst flood conceivably possible
 - Recurrence interval estimated at 10,000+ years
 - Used for spillway design to prevent overtopping of dam
 - Downstream flooding will occur during this type of event

