Workshop Topics and Objectives
The Bureau of Reclamation (Reclamation) is responsible for over 360 high and significant hazard storage dams that form a critical part of the water resources infrastructure for the western United States. As the owner of these facilities, Reclamation is committed to protecting the public and the environment from the risks that are inherent in collecting and storing large volumes of water for municipal, agricultural, industrial, and recreational use (as well as flood protection).

Quantitative Risk Analysis is a process that combines performance observations, loading probabilities, and the results of engineering analyses with professional judgment to improve understanding of the risk of failure (defined as a life-threatening uncontrolled release of stored water). While it continues to evolve as a result of lessons learned and technological advancements, the risk analysis methodology used by Reclamation is rooted in basic probability theory and has been tested over twenty years of organizational experience.

Risk analysis forms an integral part of the broader risk informed decision making (RIDM) process. Reclamation established a risk-informed decision framework in the late 1990s to meet the objectives of its dam safety program, the Safety of Dams Act, and the Federal Guidelines for Dam Safety. Risk-informed procedures are used to assess the safety of Reclamation structures, to aid in making decisions to protect the public from the potential consequences of dam failure, to assist in prioritizing the allocation of resources, and to support justification for risk reduction actions where needed.

Reclamation is proud to host its first International Best Practices in Risk Analysis Virtual Workshop.

The primary goal of the workshop is to provide participants with an overview of Reclamation’s risk analysis methodology and its proper role within a RIDM oriented dam safety program. Participants at the workshop will gain an understanding of how potential failure modes (PFMs) are conceptualized and developed, how they can be modeled as finite sequences of events, and how the probabilities of those events can be estimated using expert judgment. The course will cover both embankment dams and concrete structures and will touch upon operational PFMs. Participants will learn how to interpret the numbers generated in a risk analysis and integrate them into the broader dam safety case. In practice, the numbers themselves are not treated as decision criteria, and the decision being recommended by a risk analysis team must be consistent not only with the estimated risks but also the condition of the facility, its geologic and geographic setting, and the loadings that it may experience.

The course presenters include members of the Reclamation risk cadre and are experienced risk analysis facilitators, peer reviewers, and report authors. They are also considered subject matter experts in the fields of embankment dam design, internal erosion evaluation, structural analysis, and downstream consequence estimation.
Who Should Attend?
The workshop is designed for engineers, technicians, maintenance personnel, and administrators responsible for dams. All presentations, discussions, and printed materials will be in the English language. Participants should have a good command of general and technical English usage.

Location
This workshop will be conducted virtually through Microsoft Teams. All times listed on agenda are in Eastern Daylight Time Zone.

Registration Fee and Payment
The registration fee is US $1,000 per person. The registration deadline is March 28, 2022. The preferred method of payment is a credit card. Wire transfers are accepted. Funding is not available from the seminar organizers.

Further Information
Contact Reclamation’s International Affairs Office:
E-mail inquiries should be sent to bor-sha-internationalaffairs@usbr.gov
Information contained in this announcement can also be located at https://www.usbr.gov/international/seminars.html