



International Risk Analysis Workshop, August 4-8, 2025

Workshop Topics and Objectives

The Bureau of 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 to 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 in-person International Risk Analysis 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. Workshop participants 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 embankment dams and concrete structures, and 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.

Course presenters include members of the Reclamation risk cadre and are experienced risk analysis facilitators, peer reviewers, and report authors. The workshop presenters are 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, 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.

Location and Venue

The workshop will take place in Denver, Colorado, at the Hyatt House Denver/Lakewood at Belmar (details below). Denver is the capital of Colorado, nicknamed the Mile-High City because its official elevation is exactly one mile (5280 feet or 1609 meters) above sea level, making it the highest major city in the United States.

Registration Fee

The registration fee for this event is \$3,300 per person and includes:

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| ➤ Hotel accommodations for August 3 rd - 8 th (check-out on August 9 th) | ➤ Welcome Reception |
| ➤ Breakfasts (provided by hotel), | ➤ Close-out Dinner |
| ➤ Lunches on August 4 th , 5 th , 6 th , and 8 th (Lunches on weekends and August 7 th not included) | ➤ Technical site visit |
| | ➤ Various printed and electronic materials |
| | ➤ Transportation to organized activities |

The registration deadline is **July 7, 2024**. The fee for registrations received after the deadline is US \$3,500. A legible copy of your passport must be submitted with your registration form.

Payment

The preferred method of payment is a credit card. Wire transfer and checks are accepted. Checks should be in U.S. dollars and made payable to the Bureau of Reclamation. Funding is not available from Reclamation.

Letters of Invitation / U.S. Visa

If you require a visa to enter the U.S., early registration is strongly recommended to allow adequate time for visa processing. Reclamation will only send invitation letters after workshop registration has been completed.

Arrival and Departure Information

International travel should be arranged to Denver, Colorado, no later than Sunday, August 3, 2025. Return travel should be arranged out of Denver, Colorado, no earlier than Saturday, August 9, 2025.

Hotel Accommodations

Hotel accommodations will be provided August 3rd through August 8th (check out on August 9th). The cost of the hotel is included in the registration fee. Reclamation will make reservations on behalf of participants and provide a reservation confirmation number two weeks prior to event. The workshop will be hosted at:

[Hyatt House Denver/Lakewood at Belmar](#)

7310 W Alaska Drive, Lakewood, CO 80226

Phone: +1 (303) 922-2511

Transportation

Participants are responsible for transportation to and from Denver International Airport and the Hyatt House Denver/Lakewood at Belmar. Transportation will be provided for organized dinners and activities. Denver Light Rail is the most cost effective and recommended. (See websites for [Denver Regional Transportation District](#) and [Ground Transportation Options at Denver International Airport](#).)

Medical Insurance

Accidental injury/medical insurance is strongly recommended and should be purchased prior to traveling to the U.S. Reclamation is not financially responsible for any illnesses or injuries that occur during the Workshop.

Climate and Clothing

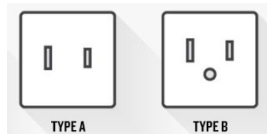
Day-time temperatures in Denver in August often exceed 32°C (90°F). Business casual attire is recommended during the workshop. During the technical site visit, close-toed shoes are required and sun protection (sunscreen, hat) is strongly recommended.

Additional Information

Dietary Needs: Please note on the registration form if you have dietary needs or restrictions.

Internet: Free Wi-Fi available at hotel.

Electricity: 120 volts AC at a frequency of 60Hz. Type A and B plugs are used (two flat blades).



Information and registration instructions available at:

https://www.usbr.gov/international/tech_seminars.html

Contact Reclamation's International Affairs Office with any questions:

E-mail: bor-sha-internationalaffairs@usbr.gov, Phone: +1 303 242 9281,



The Workshop will include a technical site visit to [Olympus Dam](#) in Estes Park, CO (depicted above).