

Safety Evaluation of Existing Dams International Technical Seminar and Study Tour

June 2-11, 2025

U.S. Department of the Interior

Introduction/Seminar Objectives

In most countries throughout the world, interest in the safety of dams has risen significantly in recent years. Aging dams, new hydrologic information, and population growth in floodplain areas downstream from dams has resulted in an increased emphasis on dam safety evaluation as well as operation and maintenance related to the safety of dams. Those responsible for the safety of existing dams must implement policies and procedures that warrant public confidence. This demands professional practices that incorporate the lessons of the past and conform to the most advanced technical state-of-the-art. The need for trained personnel is essential. This seminar will provide professional personnel with a comprehensive guide to establishing or enhancing a visual inspection/evaluation program and increase the technical capabilities of those responsible for safety evaluations.

Bureau of Reclamation officials will provide training for the seminar. Reclamation is responsible for the proper operation, maintenance, and structural safety of more than 400 dams and distribution systems. Reclamation has conducted similar seminars for its own staff, as well as for more than 6,000 technical and administrative officials from other domestic and international agencies.

Who Should Attend?

The seminar is designed for managers, administrators, engineers, and geologists responsible for the design, construction, operation, maintenance, and safety of dams. Policymakers and planners, as well as those with technical responsibilities, may also benefit from the seminar. All presentations, discussions, and printed materials will be in the English language. **Participants should have a good command of general and technical English usage.**

Due to the technical nature of the program and limited space on the motorcoach, spouses are not encouraged to accompany participants during the study tour. Space will be given to participants first.

Study Tour Agenda

June 7 – Tour of Denver

June 8 – Travel day: Denver to Colorado Springs June 9 – Mock Dam Examination of Pueblo Dam June 10 – Travel day: Denver to Las Vegas (airline ticket included in registration fee) June 11 – Hoover Dam VIP Tour and Close-out Luncheon

Photo to right: Pueblo Dam in southern Colorado. Participants will conduct an abbreviatied mock dam examination of Pueblo Dam during the Study Tour.

Seminar Topics

The first portion of the seminar, June 2-6, will consist primarily of classroom presentations and discussions. Lectures, case histories, and structured discussions covering all aspects of a dam safety examination program will be led by Reclamation engineers or geologists with extensive experience and knowledge in the areas of design, construction, operation, maintenance, and dam safety. The course outlines the hydrologic, seismic, geotechnical, electrical, mechanical, and structural considerations of dam safety, as well as operation, maintenance, surveillance, and emergency preparedness. Presentations, case histories, and a walk-through abbreviated examination are used to present the multidiscipline approach to an effective safety of dams program. A tour of the Bureau of Reclamation Research Laboratories will also be featured.

Registration Form available here:

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

Participant Presentations

During the first week of the seminar, participants will have the opportunity to give a 10-15-minute presentation on dam safety activities within their organization or country.

Please note on the registration form if you are interested in giving a presentation.

Study Tour and Simulated Exam

The post-session study tour, June 7-11, will take participants through the states of Colorado and Nevada. The study tour will begin on June 7 with a recreational tour in and around Denver, Colorado. The technical study tour begins Monday, June 9, when Reclamation staff lead participants in a mock abbreviated simulated examination at Pueblo Dam, located in the Missouri Basin Region, Reclamation's largest and most ecologically diverse region, encompassing all or parts of nine western states and extending from the Canadian border to the southern tip of Texas. On Tuesday, June 10, participants will travel by air to Las Vegas, Nevada. The study tour will conclude on June 11 with a tour of Hoover Dam and close-out luncheon.



Location and Venue

The technical session will take place in Denver, Colorado, at the Denver Marriott West. Denver is the capital of Colorado and one of the fastest growing cities in the United States. Denver is 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 U.S.

Arrival and Departure Information

International travel should be arranged to Denver, Colorado, no later than Sunday, June 1, 2025.

Return travel should be arranged out of Las Vegas, Nevada, no earlier than Thursday, June 12, 202.

Hotel Accommodations

Hotel accommodations in Denver, Colorado, June 1-7 (check out June 8), must be paid for by the participant. A block of rooms has been reserved at the Denver Marriott West at a special rate of US \$208 per night, including tax. The special rate is available until April 18. Participants will be provided with a link to make their hotel reservation after registering for the seminar.

Letters of Invitation / U.S. Visa

If you require a visa to enter the United States, it is strongly recommended to apply as soon as possible to allow adequate time for visa processing. Reclamation will only send invitation letters to those registered for the seminar.

Dietary Needs

Please provide dietary restrictions /needs on the registration form.

Medical Insurance

Accidental injury/medical emergency insurance is strongly recommended and should be purchased prior to traveling to the United States. Reclamation is not financially responsible for any illnesses or injuries that may be incurred by participants.

Climate and Clothing

Participants should expect warm weather during the study tour $(90-105^{\circ}F/32-40^{\circ}C)$. Business casual attire is recommended during the technical session. Long pants and sturdy closed-toed shoes are required during the study tour. Sun protection is recommended.

Registration Fee

The registration fee is US \$3400 per person and includes:

- Technical Sessions
- Course materials (electronic versions only)
- Hotel accommodations during the Study Tour, June 8-11 (check out June 12, 4 nights)
- Breakfasts
- Welcome Reception, June 3
- Lunches (except June 7, 8, and 10)
- Dinner on June 5
- Transportation for organized group events and Study Tour
- Oneway airline ticket during study tour (Denver-Las Vegas)

Participants are responsible for:

- Transportation from Denver International Airport to the Denver Marriott West Hotel
- Hotel accommodations at the Denver Marriott West Hotel, June 1-7 (check out June 8)
- Lunches on June 7, 8, and 10
- Dinners (except for June 5)

The registration deadline is **April 18, 2025**. <u>Due to contractual</u> <u>arrangements with hotels and airlines, no late registrations will</u> <u>be accepted.</u>

A legible copy of your passport must be submitted with the 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 the seminar organizers.

Further Information

Contact the Bureau of Reclamation's International Affairs Office:

E-mail inquiries to should be sent to:

bor-sha-internationalaffairs@usbr.gov

Phone: 1-303-242-9281

Information contained in this announcement can also be located at: https://www.usbr.gov/international/



Study Tour - Summary of Sites

Pueblo Dam located on the Arkansas River about 10 kilometers (6-miles) upstream and west of the city of Pueblo, Colorado. The reservoir has a total storage capacity of 432 million cubic meters (350,000 acre-feet). The concrete dam and massive-head buttress-type spillway structure is the principal control structure for the reservoir. It is flanked by two embankment wing dams, a right embankment with a crest length of 311 meters (1,020 feet) and a left embankment with a crest length of 220 meters (720 feet). The spillway within the concrete section has a crest width of 168 meters (550 feet) and was designed for a maximum spill discharge of 5,423 cubic meters per second (191,500 cubic feet per second) at the maximum water surface elevation.

The river outlet works is controlled by two 1.2-by-1.2 meter (4-by 4-foot) high-pressure gates and regulate normal water releases into the river. Additional releases may be made to the river through three separate spillway outlet works. Two 2-by-2-meter (6-by 6.5-foot) high-pressure gates control each outlet work.

Hoover Dam and Lake Mead, spanning the Arizona-Nevada State line, are located in the Black Canyon of the Colorado River about 56 kilometers (35 miles) southeast of Las Vegas, Nevada. It is a concrete thick-arch structure, 221 meters high (726.4 feet) and 379 meters long (1,244 feet). The dam contains 2.48 million cubic meters (3.25 million cubic yards) of concrete; total concrete in the dam and appurtenant works is 3.36 million cubic meters (4.4 million cubic yards).

Built during the Depression; thousands of men and their families came to Black Canyon to tame the Colorado River. It took less than five years, in a harsh and barren land, to build the largest dam of its time. Now, years later, Hoover Dam still stands as a world-renowned structure. The Dam is a National Historic Landmark and has been rated by the American Society of Civil Engineers as one of America's Seven Modern Civil Engineering Wonders.