



Teton Dam Foundation, Idaho, USA, from USBR

AEG is proud to present the next Shlemon Short Course. The short course will be held in Denver Colorado, on May 16-17, 2013 and will focus on a detailed review of select dam failures and incidents to provide a “lessons learned” to practicing engineering geologists. The short course format will include 1 hour interactive presentations and a field trip to a dam that recently underwent extensive rehabilitation. Below is the current list of dams to be discussed and the associated presenters:

Topic/dam	Presenter	Description
Keynote	Richard Goodman, UC Berkeley	Dr. Goodman, a nationally recognized expert in geology for dam foundations, will provide an overview of the importance of geology in the design and performance of dams.
Malpasset, France	Richard Goodman, UC Berkeley	Malpasset failed in 1959 as a result of uplift pressures on a removable block within the foundation. Little consideration was given to the foundation geology during design. 421 people died.

Teton, Ririe, Fontenelle Dams – Influence of Organizational Culture on Dam Safety, Idaho and Wyoming, USA	Nate Snorteland, USACE-RMC	The presentation addresses the influence of organizational culture on dam safety and decision-making. Fontenelle (suffered an extreme seepage incident), Ririe (has performed extremely well), and Teton (complete dam failure).
St. Francis Dam Failure, California, USA	J. David Rogers, MS&T	The St. Francis Dam failure was one of the worst civil engineering failures in the 20 th century in the United States, 450 people died.
Field Trip to Horsetooth Dam and Reservoir, Fort Collins, Colorado, USA	Al Kiene and Bryan Simpson, USBR	Horsetooth Dam and was rehabilitated between 2000 and 2004 to address dam safety issues with the limestone foundation, seepage through the embankment and foundation, and to improve stability.
AV Watkins Incident, Utah, USA	Mark Bliss, USBR	AV Watkins Dam experienced a severe seepage incident in 2006 when 100 to 150 gallons per minute were flowing through a location at the downstream toe. Emergency measures were enacted and the dam was saved and repaired.
Austin Dam Failure, Pennsylvania, USA	Gregg Scott, Scott Consulting	Austin Dam was a 52 ft high concrete dam that failed during a rainstorm in 1911 due to foundation movement. Obvious distress did not prevent the owners from re-filling the reservoir. The town of Austin PA. was destroyed and 78 deaths were attributed to the resulting flood.
Fontenelle Dam Incident Wyoming, USA	Michael Gobla, USBR	Fontenelle Dam experienced a severe seepage incident during first filling. The dam nearly failed adjacent to the spillway due to excessive seepage through and along the foundation of the embankment. The main incident was preceded by four other incidents that at the time were not identified to be seepage

Teton Dam Failure, Idaho USA	Bill Engemoen and Dan Osmun, USBR	related. Teton Dam failed 4.5 hours after the initial signs of distress. The failure is attributed several factors including inadequate foundation preparation, inadequate design considerations for the extremely complex geology, lack of properly designed seepage collection systems for the core.
Silver Lake Dam Failure, Michigan, USA	Kevin Richards, USACE-RMC	Silver Lake Dam suffered from extensive erosion below the spillway fuse plug resulting in release of the reservoir and failure of another downstream dam.
Quail Creek Dam Failure, Utah, USA	Douglas Boyer, USACE	Quail Creek Dam failed due to extensive foundation seepage and the failure caused \$12 million in damage and approximately \$8 million to reconstruct the dam.
Summary, Lessons Learn, Design for Uncertainty	Pete Shaffner and Greg Scott, USACE-RMC	This presentation will provide a general summary of the short course and provide information and recommendations on how geologic information should be used help to understand risks and minimize issues with dams and their foundations.



St. Francis Dam Failure, California, USA, from Ventura County Museum of History & Art, colorization by Pony Horton

Registration Form

NAME (LAST)	(FIRST)	(MI)	MEETING STATUS
			Attendee
			Speaker
NAME FOR BADGE			Sponsor
COMPANY/INSTITUTION			MEMBERSHIP
			Member
ADDRESS			Non-member
CITY/STATE/ZIP			
COUNTRY			
PHONE NUMBERS			
OFFICE () -		CELL () -	
FAX () -			
EMAIL ADDRESS			
MEETING REGISTRATION			
			By 4-1-13 After 4-1-13
Full Registration			\$325.00 \$375.00
Full Registration: Non-Member – includes 1 year membership in AEG			\$400.00 \$450.00
Ice Breaker Reception (Wed., May. 15)		Must Register	Complimentary
SPECIAL NEEDS:		MAKE CHECK PAYABLE TO	TOTAL AMOUNT:
PREFER VEGETARIAN MEALS: <input type="checkbox"/>		"AEG"	\$
DIABETIC: <input type="checkbox"/>			
KOSHER: <input type="checkbox"/>			
OTHER: <input type="checkbox"/>			

If you have any questions, contact:
Heather Clark, Meetings Manager

303-757-2926
heather@aegeweb.org
Fax: 720-230-4846

Send registration form to:
Association of Environmental & Engineering Geologists
PO Box 460518
Denver, CO 80246

Please indicate method of payment (check one): Amount of \$ _____

Check MasterCard Discover VISA American Express

Account Number for charge card (include all digits): _____

Expiration Date: _____ Three Digit CVD Code: _____

Signature: _____

Name on Card (PLEASE PRINT): _____

Address for Credit Card Billing: _____

Short course rates increase April 1, 2013 and the deadline to register is April 29, 2013

All participants will need to submit a photocopy of their driver's license by **April 29, 2013** to be allowed on the field trip. Email to heather@aegeweb.org or fax to (720) 230-4846.

Appetizers will be provided at the ice breaker reception on Wednesday night. Breakfasts and refreshments during breaks will be provided Thursday and Friday along with lunch on Thursday. Transportation to Horse Tooth Dam will also be included in the short course registration.

The short course rate will be \$325 for AEG member and \$400 for nonmembers. **All nonmember participants will receive a one year membership in AEG with short course registration.** The short course will be held at the Denver Tech Center Hyatt in the Denver Technological Center. Rooms are offered at \$139/night and include parking and guest room internet.

For additional information please contact Edwin Friend efriend@rjh-consultants.com.

A short course registration form is attached to this Brochure and at www.aegeweb.org/ShlemonDams.

The Hyatt is located within walking distance of a light rail station that services downtown. Additionally the Hyatt has a complimentary shuttle that will travel within 5 miles of the hotel and provides access to hundreds of outstanding restaurants. *Hotel rooms at the Hyatt Tech Center can be reserved at the following website:* <https://resweb.passkey.com/go/AEG2013> or call 1-888-421-1442 (Group Rate is \$139.00 night and includes parking and guest room internet)

Association of Environmental & Engineering Geologists

Shlemon Short Course

Dam Foundations Failures and Incidents



Teton Dam Core Trench and Foundation, Idaho, USA from USBR

**Hyatt Tech Center
Denver, Colorado
May 16-17, 2013**



Fontenelle Dam Incident, Wyoming, USA from USBR

