



Leveraging PFMA's to Perform SQRA's (sponsored by USSD)

Benefits of Attending the Course

- Receive comprehensive instruction on a full range of dam safety issues
- Learn where Semi-Quantitative Risk Assessment fits within the overall risk assessment framework and Tolerable Risk Guidelines
- Obtain information on recent developments in hydrologic hazard assessment, including simplified approaches for an SQRA.
- Learn a preliminary new simplified approach for estimating life safety consequences
- Hear discussion of non-life safety consequences
- Review Potential Failure Mode Analysis procedures
- Review obtaining seismic hazard information from the USGS website
- Develop an understanding of the historically most significant potential failure modes
- Learn the details and strategies for Semi-Quantitative Risk Assessment
- Experience several exercises to help reinforce the concepts presented
- Obtain hands-on experience from a facilitated, comprehensive practicum in small groups

Agenda

Day 1

Time	Topic	Presenter
0830-0845	Introduction	USSD
0845-0945	Risk Assessment Framework	John France
0945-1015	Review of the PFMA process	Gregg Scott
1015-1045	Break	
1045-1115	SQRA process including portfolio considerations	Gregg Scott
1115-1200	Evans Creek Dam Exercise	Gregg Scott
1200-1300	Lunch	USSD
1300-1400	Life Safety Consequence Categorization	Bill Fiedler
1400-1445	Screening Level Hydrologic Loading (Introduction)	Mel Schaefer
1445-1500	Screening Level Seismic Loading	John France
1500-1530	Break	
1530-1630	Screening Level Hydrologic Loading (methodology)	Mel Schaefer
1630-1700	Non-Life Safety Consequences	Bill Fiedler
1700-1715	Preparing for a PFMA/SQRA and Introduction to Potential Failure Mode Discussion	Bill Fiedler
1715-1730	Discussion	All

Day 2

Time	Topic	Presenter
0830-0930	Potential Failure Mode development part 1 Flood Overtopping	Bill Fiedler
0930-1030	Potential Failure Mode development part 2 Concrete Dam Foundations	Gregg Scott
1030-1100	Break	
1100-1200	Potential Failure Mode development part 3 Operational failures with case histories.	Bill Fiedler
1200-1300	Lunch	USSD
1300-1430	Potential Failure Mode development part 4 Internal Erosion failures with case histories.	John France
1430-1500	Break	
1500-1530	Building the Case	Bill Fiedler
1530-1630	Strategies for facilitating and efficiently estimating failure likelihood	John France
1630-1700	Preparation for practicum	Gregg Scott
1700-1730	Discussion and homework	All

Day 3

Time	Topic	Presenter
0830-1200	Practicum – Participants to complete SQRA for example dam in small groups (breakout rooms). A “facilitator” is appointed for each group. Teams will take a 30-minute break as needed.	7 Facilitators
1200-1300	Lunch	
1300-1500	Breakout teams continue to work	7 Facilitators
1500-1530	Break	
1530-1645	Breakout Teams Report on Their Results	7 Teams
1645-1730	Panel Q and A and wrap-up	4 Instructors