



The Geo-Institute Embankments, Dams and Slopes Technical Committee will live-stream the session “**EDS Extreme Event Research and Emerging Trends**” on Wednesday, December 4, 2024, from 11 am - 1 pm EST. The topics include:

“Hurricane Florence Reconnaissance,” **Brian Anderson**, Ph.D., PE., F. ASCE

This presentation will describe the reconnaissance effort implemented after Hurricane Florence in September 2018 that struck southeastern North Carolina and South Carolina. The Geotechnical Extreme Events Reconnaissance Association (GEER) deployed to investigate the resulting hydrology and performance of dams, levees, transportation infrastructure, coastal/waterfront structures, and other observations. This presentation will discuss the perishable post-disaster data that was collected.”

“Railroad Responses to Extreme Events” **Caleb Douglas**, Ph.D., P.E.

Railroads in the United States have been responding to extreme events since they were constructed, most over 150 years ago. Case histories will be presented to demonstrate the impacts from extreme events on the railroads. Common themes in railroad responses and considerations for engineers responding to these events will be described.

“Fire, flood, and mud: Assessing postfire debris-flow hazards across Western U.S.”

**Jason Kean**, U.S.G.S.

This presentation will discuss post wildfire debris-flow hazards across the Western U.S. including increased runoff, erosion, and debris-flow volume.

“Considerations of compacted clay strength under extreme wetting- drying cycles”

**Ghada Ellithy**, Ph.D., P.E.

This presentation will discuss some considerations of the shear strength of compacted clay materials when exposed to longer periods of drought and extreme rainfall events.