



ASSOCIATION OF ENVIRONMENTAL AND ENGINEERING GEOLOGISTS
San Francisco Section

Announcing the March 2010 San Francisco Section Meeting

Observed Ground Failure Mechanisms— January 12, 2010 Haitian Earthquake

Jeff Bachhuber, CEG
Fugro-William Lettis & Associates

MEETING DETAILS

Restaurant:	Date and Time:
Sinbad's	Tuesday, March 16th, 2010
Pier 2 Embarcadero Street	6:00 pm—Social Hour and Sign-in
San Francisco, CA	7:00 pm—Dinner
	8:00 pm—Presentation

Cost: \$40 AEG members, \$50 non-members, \$20 Students

Meal Choice: Chicken, Beef, Fish, and Vegetarian – you do not need to send in your meal choice.

Reservations*: To RSVP, fax or e-mail Sachiko Tanikawa (fax # 866-400-4068, email: treasurer@aegsf.org) by **12 PM, Friday March 12th** with the following information:

(1) Name (2) Phone number/e-mail

Driving Directions: From the Bay Bridge, take the Fremont Street Exit and the Folsom Street Ramp. Go left (east) on Folsom Street, then left (north) onto the Embarcadero (Herb Caen Way). The driveway for Sinbad's is on the right, south of the historic Ferry Building. Please watch out for the pedestrians and cyclists when turning into the driveway. Thank you.

BART Directions: Exit the Embarcadero Station; walk up Market Street toward the Ferry Building (less than ½ a mile toward the Bay and to the east). Cross Embarcadero and Sinbad's is located next to the Alameda ferry pier on the south side the historic Ferry Building.

Parking: \$4 valet parking is available or metered parking is available on and around the Embarcadero.

*To assist us with reservations and to help the restaurant with the set-up, please RSVP in advance. Walk-ins are welcome. No shows and late cancellations will be charged.

See next page for abstract and speaker biography.

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ABSTRACT

A team of geologists and engineers organized under Geo-Engineering Extreme Events Reconnaissance (GEER) made a trip to the island of Hispaniola to observe the effects of the Magnitude 7.0 earthquake that recently struck portions of the country of Haiti. The January 12, 2010, Haiti earthquake occurred in the boundary region separating the Caribbean plate and the North America plate. This plate boundary is dominated by left-lateral strike slip motion and compression, and accommodates about 20 mm/yr. slip, with the Caribbean plate moving eastward with respect to the North America plate. The location and focal mechanism of the earthquake are consistent with the event having occurred as left-lateral strike slip faulting on the Enriquillo-Plantain Garden fault system. At least 112,405 people were killed, 196,595 injured, 800,000 to 1 million displaced and severe to extreme damage occurred in the Port-au-Prince area. Curiously, there was no observed fault rupture exposed at the surface. Secondary (observed) effects included liquefaction, lateral spreading, landslides and extensive structural damage both in Port-au-Prince and outlying urban areas. Preliminary findings and observations are presented in this talk through financial support from the University of Texas, and will eventually be included in a formal report by the GEER participants. The presentation will focus on preliminary observations regarding surface fault rupture along the Enriquillo-Plantain Garden fault, coastal uplift recorded by elevated living coral, coastal liquefaction/lateral spread failures in delta fan deposits, and possible correlations between geologic conditions and density of structural failure.

SPEAKER BIOGRAPHY

Mr. Jeff Bachhuber, CEG, is a Senior Principal engineering geologist and Vice President of Geotechnical Services with Fugro-William Lettis & Associates, Inc. Mr. Bachhuber has 25 years of professional experience managing and performing engineering geology/geotechnical services for major civil projects in the United States and abroad. Mr. Bachhuber participated in research of seismic ground motion effects, including reconnaissance and NEHRP studies of the 1999 Koceali earthquake in Turkey, and preparation of NEHRP-funded liquefaction and amplified ground shaking maps of Puerto Rico. He has conducted numerous other studies on lifeline and critical structures (pipelines, nuclear power plants and tunnels) susceptible to strong ground shaking.

Thank you for the RSVP! See you on Tuesday, March 16th!