AEG Sacramento Section

SACRAMENTO CHAPTER

Tuesday, October 23, 2018

Speaker: **Scott Lindvall, CEG.**
Senior Principal Geologist - Lettis Consultants International, Inc. (LCI)

Topic: **"Fault Rupture Hazard Investigations for the Los Angeles Aqueduct System: Owens Valley to the San Andreas"**

Location: Aviator's Restaurant
6151 Freeport Blvd
Sacramento, CA 95822

Parking: Lots of free parking! Link to map

Meeting Sponsor: Lettis Consultants International, Inc.
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RSVP: **Please RSVP by Close of Business Monday, October 22nd!**

Agenda:
5:30-6:30pm – Social hour
6:30-7:30pm – Announcements & Dinner
7:30-8:30pm – Speaker & Questions

Meeting Cost:
Members: $30
Non-Member: $35
Students: $10 (the FIRST 5 students to RVP are free!)
There will be a $5 surcharge for walk-ins.

Student Sponsorships welcomed! Sponsor a student for $20 (suggested).
RSVP at http://www.aegsacto.org/meetings/signup/
or email: chase.white@conservation.ca.gov

"Fault Rupture Hazard Investigations for the Los Angeles Aqueduct System: Owens Valley to the San Andreas"

October 23, 2018

Presented by: Scott Lindvall, CEG.
Senior Principal Geologist with Lettis Consultants International, Inc. (LCI)

The Los Angeles Aqueduct System delivers water from the Owens Valley to over 4 million residents within the City and is owned and operated by the Los Angeles Department of Water and Power, the largest municipal utility in the U.S. The first aqueduct was completed in 1913 and extends southward through the seismically active Owens Valley, across the Garlock and San Andreas faults, and into the faulted and folded Transverse Ranges. The alignment crosses both the strike-slip 1857 ~M7.8 San Andreas and 1872 ~M7.5 Owens Valley historic earthquake ruptures. The southern terminus of the aqueduct at the Van Norman Complex in the northern San Fernando Valley was impacted by both the 1972 M6.6 San Fernando and 1994 M6.7 Northridge reverse earthquakes.

This presentation will provide a brief history and overview of the Los Angeles Aqueduct, discuss historic earthquake ruptures and geology along the aqueduct alignment, and detail four recent seismic hazard investigations of key elements of the aqueduct system to address the hazard of surface fault rupture. From north to south, these facilities include Tinemaha Dam, North Haiwee Dam, South Haiwee Dam, and Elizabeth Tunnel. Tinemaha Dam is located along the 1872 rupture of the Owens Valley fault. North and South Haiwee Dams are located near the southern end of 1872 rupture, in an area of broad distributed faulting. The 5-mile-long Elizabeth Tunnel crosses the San Andreas fault zone near Lake Hughes.

About our Speaker:

Scott Lindvall is a Senior Principal Geologist with Lettis Consultants International, Inc. (LCI) and a Certified Engineering Geologist in California with over 30 years of experience performing seismic and geologic hazard analyses, fault studies, and engineering geology investigations for both existing and proposed critical facilities.

In addition to his consulting career, Scott's expertise in neotectonics, paleoseismology, and seismic hazards has enabled him to pursue research projects, funded by USGS National Earthquake Hazards Reduction Program (NEHRP) and the Southern California Earthquake Center (SCEC), designed to better quantify the slip rate, surface displacement, style of deformation, and timing of past earthquakes on active faults throughout California. Scott has also performed detailed mapping of surface ruptures in southern California and Turkey, including the 1986 M6.6 Superstition Hills, 1992 M7.3 Landers, 1999 M7.4 Izmit, 1999 M7.1 Hector Mine, and the 1999 M7.1 Duzce, earthquakes. He received his B.S. in Geology from Stanford University in 1984 and his M.S. in Geology from San Diego State University in 1988.