

Fire, earth & rain: Emergency response for wildfire-induced landslide hazards

The Jahns Distinguished Lectureship, established in 1988, is sponsored by the Association of Environmental and Engineering Geologists and the GSA Engineering Geology Division. Its purpose is to provide funding for distinguished engineering geologists to present lectures at colleges and universities in order to increase awareness of students about careers in engineering geology. The lectureship is named in honor of Dr. Richard H. Jahns (1915- 1983), an engineering geologist who had a diverse and distinguished career in academia, consulting and government.

Wildfire is a unique natural hazard because it poses immediate threats to life and property as well as creating conditions that can lead to subsequent debris flows and accelerated rock fall. This is a significant problem in the western U.S. where large wildfires have become more frequent since the mid-1980s. Limiting the impact of these post-fire geologic hazards requires determining their likelihood and location within the burned area. A rapid assessment is needed to ensure mitigation measures can be implemented prior to an initiating rainfall event.

Biography

During most of his 36 years in the US Forest Service, **Jerome (Jerry) De Graff** served in positions designated as being either an environmental or engineering geologist on National Forests in Utah and California. In those capacities, he collected and interpreted geologic information needed for sustainable development, multiple-use management of natural resources, and emergency response. Jerry acted as the in-house geologist providing information about geomorphic processes, groundwater conditions, and other relevant geologic conditions. During his last 6 years, he was a Forest Service On-Scene Coordinator for Superfund-type issues and responses at abandoned mines and other Forest Service sites in California. Since retiring from government service in February 2014, Jerry continues his geology career teaching graduate courses for the Department of Earth & Environmental Science at California State University-Fresno, acting in editorial and related capacities for various professional journals, and being active in professional organizations.

During his geology career, Jerry has been active in professional organizations; notably the Geological Society of America (GSA) and the Association of Environmental & Engineering Geologists (AEG). He joined GSA in 1972, was made a Fellow in 1983, and served as Councilor from 2006-2010. In addition to holding the Chairmanship and other leadership positions in GSA's Engineering Geology Division, Jerry received their Meritorious Service award in 1997 and in 2011. He was honored to receive their Distinguished Practice Award in 2004. Jerry joined AEG in 1980 and chaired their Committee on Landslides from 1984 to 1995. He received presidential citations in 1995 and 2013 in appreciation for his service to AEG. Jerry is presently vice-Chair of the San Joaquin Valley Chapter in AEG's Sacramento Section.

A native of the Finger Lakes region of upstate New York, Jerry graduated from the State University of New York-Geneseo with a BS in Education/Earth Science in 1967. He continued to take geology courses there for six years while working full-time. During the last five years while an instructor at the Strasenburgh Planetarium (Rochester, NY), he realized he was too interested in what was beneath his feet to continue talking about what was happening among the stars. So Jerry and his wife moved west where he earned an MS in Geology from Utah State University in 1976. A job offer from the US Forest Service after a year as a USU researcher seemed more attractive than his original goal of returning east to teach in a community college, so he took it and never looked back.

While not hired as a researcher for the US Forest Service, Jerry often undertook extended studies in order to generate needed geologic information. Other opportunities to gain geologic information occurred during overseas assignments in the Caribbean, Thailand, and Italy. When the results seemed interesting, he would make an effort to share the information in publications or through presentations at conferences. Consequently, he has authored or co-authored more than 60 contributions to journals, books, and proceedings volumes. With Dr. Robert B. Johnson, he co-authored the textbook, **Principles of Engineering Geology**, which was awarded GSA's E.B. Burwell Jr. Memorial Award in 1989 and AEG's Claire P. Holdredge Award in 1990. In 2010, Jerry received the annual AEG publication award for the paper, "The formation and persistence of the Matthieu landslide-dam lake, Dominica, W.I.", published in the journal, **Environmental and Engineering Geoscience**.