

NORTHERN CALIFORNIA GEOLOGICAL SOCIETY



NCGS FIELD TRIP *The Geology of Sonoma Mountain* *Sonoma County, California* **Saturday May 2, 2009** **Field Trip Leaders:**

James Allen and Dr. Luther Strayer, *CSU East Bay, Dept. of Earth and Environmental Sciences*

Peter Holland, *Vector Engineering, Inc*

Ron Rubin, *AMEC Geomatrix*

Sonoma Mountain in Sonoma County is largely composed of the late Miocene to Pliocene Sonoma Volcanics and interbedded sedimentary units. The Sonoma Volcanics are the largest of several Neogene volcanic fields in the San Francisco Bay Area which young in age to north. These volcanic fields include the Quien Sabe Volcanics, Berkeley Hills Volcanics, the Tolay Volcanics, Sonoma Volcanics, Burdell Mountain Volcanics, and the Clear Lake Volcanics, which are interpreted to be the product of mantle upwelling behind a slab window recording the passage of the Mendocino Triple Junction. This trip will consist of visiting locations within the Sonoma Volcanics on the Sonoma Mountain area to inspect various volcanic and poorly mapped sedimentary units which make up the framework geology of the mountain. Lithology, stratigraphy, slope stability and regional offset along strike-slip faults in the area will be discussed. In an ongoing effort to map the geology of Sonoma Mountain in the detail needed, several challenges arise: The mountain is riddled with numerous faults including the active Rodgers Creek fault, lateral facies changes of poorly mapped sedimentary units, and landslide complexes often hampering mapping. Continuing radiometric age dating, paleontology, and accurate landslide identification greatly aid in bedrock mapping of Sonoma Mountain and our understanding of the geology along the Rodgers Creek fault. This trip compliments the February 23, 2008 NCGS trip by the leaders.

What field trip to wine country goes without samples, so apparently we'll enjoy some products from the fine Far Niente Winery establishment, namely Dolce. Thank us later!

*******Field Trip Logistics*******

THIS FIELD TRIP WILL BE LIMITED TO 30 PEOPLE. Cost: \$25.00

Map of meeting area: May 2, 9:00 AM: Sonoma State University, parking lot F. From northbound Highway 101, take the Sierra Avenue exit eastward. Sierra Avenue changes to East Cotati Avenue, continue east about 2 miles to Sonoma State University.

*******Registration*******

Registration Form for The Geology of Sonoma Mountain, Sonoma County, California, Field Trip

Name: _____ E-mail: _____

Address: _____ Phone (day): _____ Phone (evening): _____

Lunch: Regular: _____ Vegetarian: _____ (Please check one) Check Amount: _____

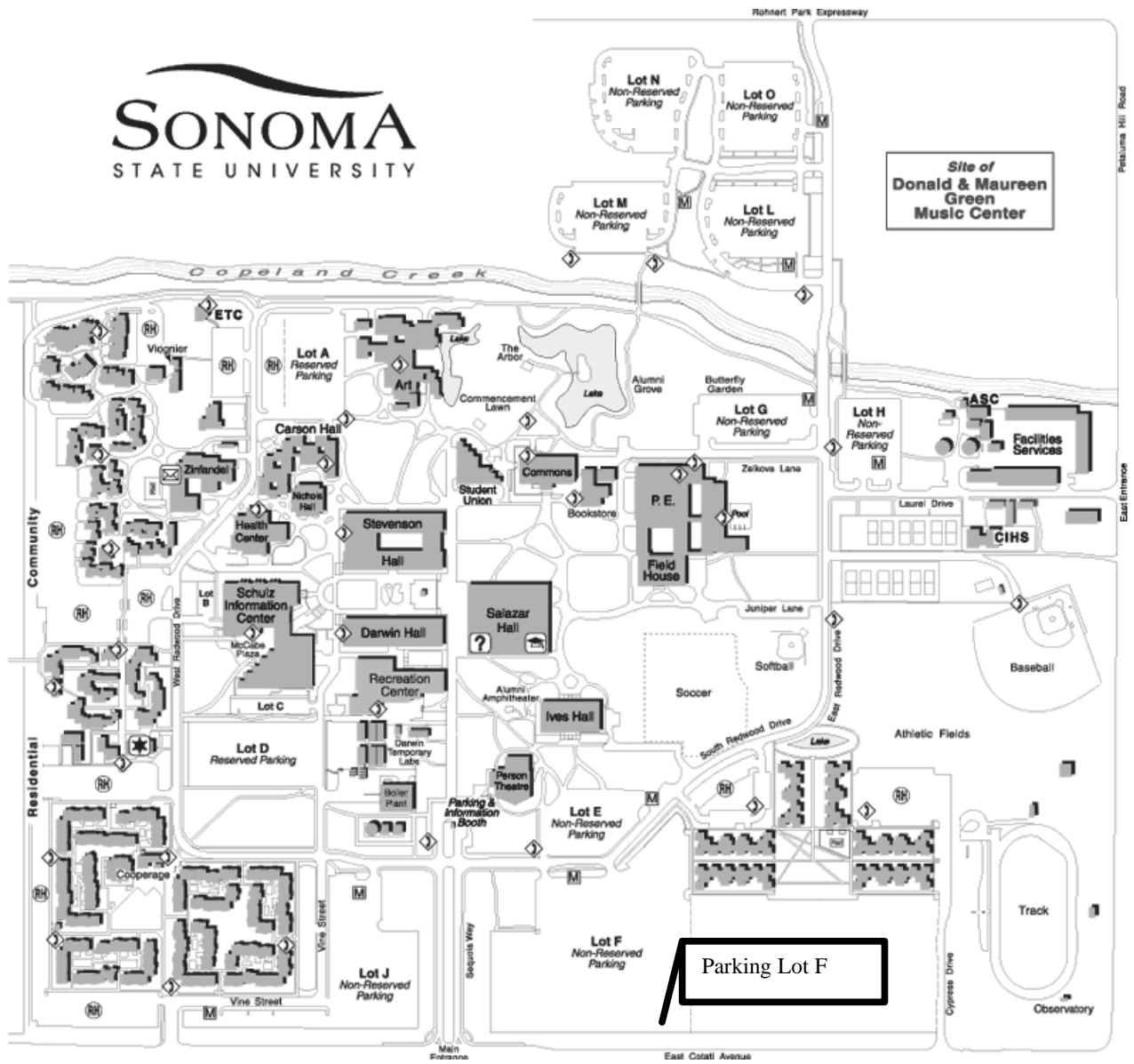
Please mail a check made out to NCGS to: **Rob Nelson, 269 College View Drive, Rohnert Park, CA 94928**

Carpooling is suggested for this fieldtrip. Please let us know if you can provide a van and the NCGS can reimburse your gasoline expenses.

Questions: e-mail: rlngeology@sbcglobal.net Phone: (707) 795-8090 (evening); (707) 548-3268 (day)

SONOMA

STATE UNIVERSITY



Parking Lot F