

Inland Geological Society

January 2025

Newsletter of the Inland Geological Society Volume 37 No. 1

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Next Meeting:

**Tuesday, January
14th**

Time:

Social: 6:00pm
Dinner 6:30pm
Presentation:
7:00pm

Location:

3 Iron
Brewing Company
898 South Via Lata,
Suite A
Colton, CA 92324

Coming to Dinner?

Students \$10
IGS Members \$12
Non-Members \$15
Please RSVP by
January 10th to:

rsvp.igs@gmail.com

January Speaker: Margaret Gooding

"Seismic Hazard of the Fontana Seismic Trend"

Abstract:

Southern California is a seismically active region with a large population. The Study Area is the Fontana Seismic Trend, an area of intense earthquake activity in western San Bernardino County. There has not been much significant work done to quantify the potential seismic hazard posed by it. This presentation will show that there is potential for a moderate seismic event on the Fontana Seismic Trend that will likely cause quite a bit of damage and disrupt lives. The major faults nearby have been studied extensively, but this is not the case for the Fontana Seismic Trend. When plotted on a map, the earthquake epicenters of the Fontana Seismic Trend display a significant linear pattern both two dimensionally and three dimensionally.

This presentation discusses the methods used to determine the fault parameters and details the results from the seismic hazard analysis. In this presentation, the location and direction of movement of the underlying fault are identified and configured to fit the earthquake data. Using the plotted fault location, direction of movement and length, the maximum potential event that might occur on this fault was also quantified. HAZUS-MH (a FEMA software extension for ArcGIS) was used to perform a seismic hazard analysis to find out what type of damage and casualties can be expected if a moderate event occurs on this fault.

(continued on p. 2)

Speaker Biography:

Margaret Gooding is a well-rounded, well-educated person with many years of varied work experience who is now retired. She has been working in the GIS field for the last 25+ years for several employers. Specialties included cartographic output for printing or reports, writing and/or editing reports, GIS analysis and more. She has a Master of Science in GIS from Manchester Metropolitan University through the UniGIS program and a Bachelor of Science in Geology with a minor in Art from Cal State Fullerton. She is also involved in the community as Treasurer for the Inland Geological Society and as a committee chair for the Redlands Art Association.

Her master's thesis (Seismic Hazard Analysis of the Fontana Seismic Trend) is the topic of this talk with some newer, refined data to better locate the Fontana fault.

ANNOUNCEMENTS:

The Inland Geological Society will meet the second Tuesday of each month at:

3 Iron Brewing Company

898 South Via Lata , Suite A

Colton, California 92324

(<https://www.3ironbrewingco.com>)

Our next meeting is scheduled for Tuesday, February 11, 2024.

Visit our:

- Webpage at <https://www.inlandgeo.org>.
- Facebook Page at <https://www.facebook.com/groups/InlandGeo/>.

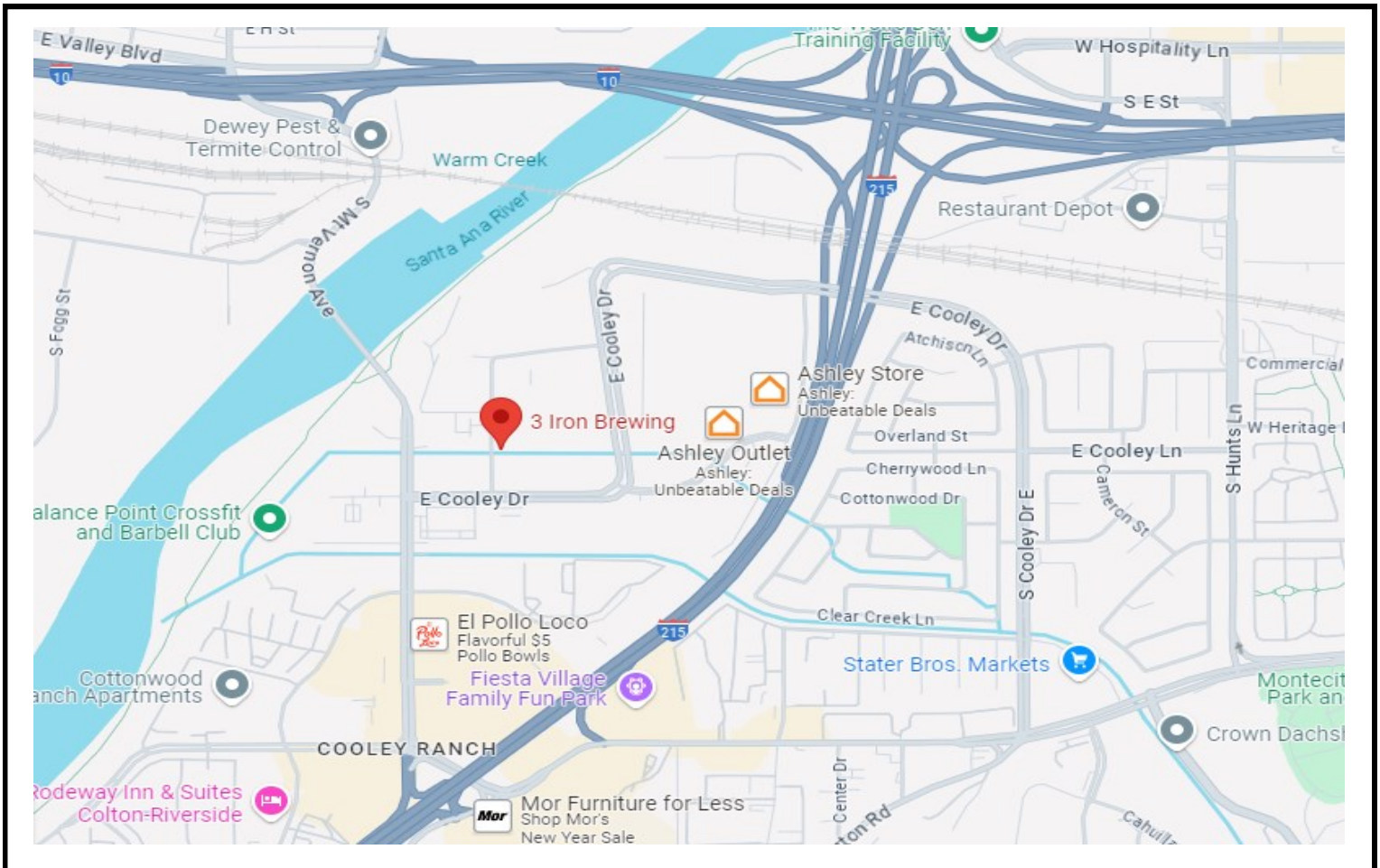
If you are interested in serving as the Inland Geological Society Membership Chair, please email Margaret Gooding at mgooding@roadrunner.com.



IGS coffee mugs are available at the monthly meetings for \$10. Get yours at the upcoming meeting!

3 Iron Brewing Company

898 South Via Lata , Suite A
Colton, California 92324



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