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**SDAG
Announcements**

SDAG MEETING ANNOUNCEMENT

Wednesday, July 16th, 2025

6:00 pm - Social Hour | 7:00 pm - Dinner | 8:00 pm – Program

LOCATION:

[Marina Village - Catalina Room](#)

1936 Quivira Way
San Diego, CA 92109

SPEAKER:

Rachel Maxwell, PG

**TOPIC: "Is this spring connected to that
Aquifer?"**

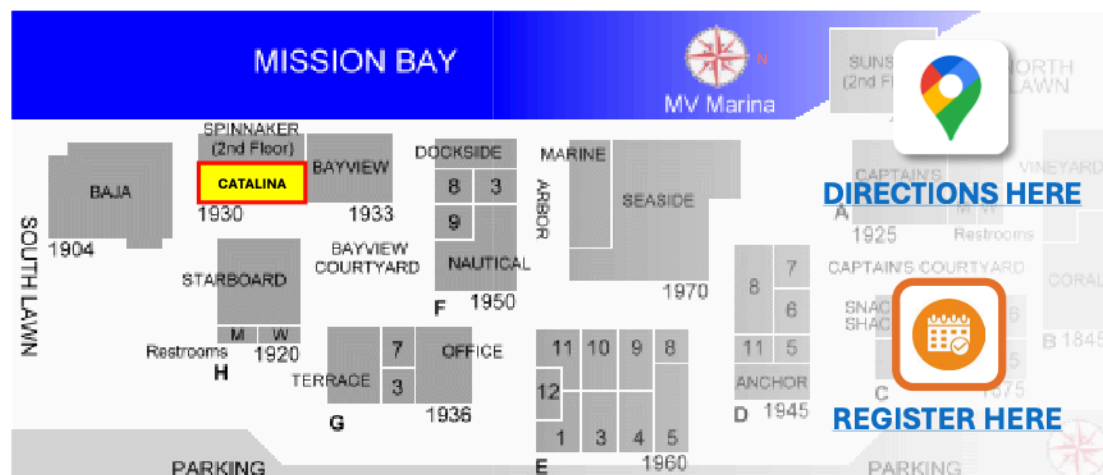
DINNER: Hawaiian Buffet (includes Kahlua Pork, Sweet & Tangy Barbecue Chicken, and vegetarian options)

COST: Member \$55.00 | Non-Member \$65.00 | Student \$25.00

RESERVATIONS:

Make & Pay your reservation online through the SDAG website,
before **6PM SUNDAY, JULY 13th**

Please note, all meeting reservations require online pre-payment due to venue costs, venue contracts, and loss of money due to no shows. Refunds cannot be processed after the registration deadline.





Meet Our | Speaker & Topic



RACHEL MAXWELL, PG

Senior Scientist at Roux

Rachel Maxwell is an experienced Professional Geologist with a demonstrated history of working in the environmental services industry. She is skilled in data analysis, environmental forensics, litigation support, site assessments, water resource assessments, remediation, and land mitigation assessments. Rachel has worked with environmental issues at a wide array of industries, including dry-cleaning facilities, industrial manufacturing facilities, municipal/industrial landfills, metal smelting facilities, and remote desert ecosystems. Rachel earned her Master's degree in Soil, Water, and Environmental Science from the University of Arizona and continued her education in Geology at the University of California, Berkeley and South Dakota School of Mines and Technology.

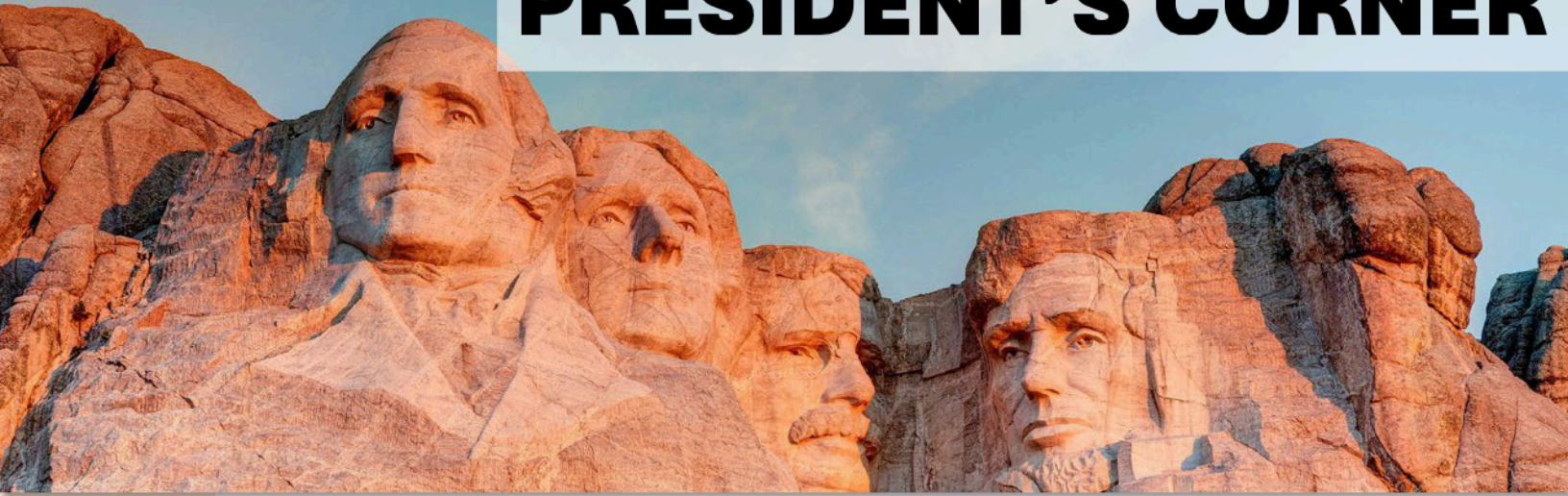
ABSTRACT:

"Is this spring connected to that Aquifer?"

Desert ecosystems are an environment of climatic extremes, characterized by scarce water and sparsely vegetated lands. Here ecological adaptation to arid conditions is highly dependent on water to support life. However, despite these climatic extremes, the Mojave-Sonoran Desert area is one of the most important ecological regions in the southwestern United States. In this region, springs play an important role in supporting important biodiversity hotspots, whose water is used by both wildlife and humans. While water sources that sustain many of the springs in the Mojave-Sonoran Desert are poorly understood, it is acknowledged that small variations in groundwater elevation can have considerable effects on surface spring discharge. With the increasing use of groundwater, the effect of groundwater extraction on groundwater-dependent ecosystems in the Mojave-Sonoran Desert is an ongoing concern. Therefore, a greater understanding of spring-

aquifer connectivity is needed. Regional investigations were conducted using various forensic tools and integrating multiple lines of evidence from approximately 200 springs throughout the Mojave-Sonoran Desert area. These lines of evidence included field water quality parameters such as temperature, pH, and conductivity, as well as geochemical characteristics of water including stable isotope, radiocarbon, and tritium analyses. Coupled with spring-site geology, these results increased the understanding of groundwater flow-paths throughout the Mojave-Sonoran Desert area. Which in turn has important implications for managing activities potentially impacting groundwater and desert springs. Here we review case studies from our spring monitoring efforts that began in 2010 and the forensic tools used to better understand the spring-aquifer connectivity in the Mojave-Sonoran Desert area.

PRESIDENT'S CORNER



Hello SDAG Members!

We had a wonderful joint meeting with South Coast Geological Society for our June meeting held at beautiful El Adobe de Capistrano in San Juan Capistrano, where we had around 80 people attend! Dr. Miles Kenney presented a captivating presentation where he walked us through his local to regional seismic hazard evaluation for the Beverly Hills Unified School District. Thanks again to John Teasley for recording the presentation, which is now available on our website!

As a reminder, the Annual SDAG Field Trip will be held this **September 26th to 28th**, where we will explore the San Andreas Fault near the Wrightwood area! If you're interested in attending or would like more information, either reach out to me or check out the Announcements on the SDAG website. The field trip is limited to the first 50 paid attendees and as of today we only have 6 spots remaining!

For our July 16th meeting, we will be returning to the lovely Catalina Room at Marina Village! Our speaker will be Rachel Maxwell, PG, Senior Scientist I at Roux, who will give a presentation on "Is this spring connected to that Aquifer?" You're not going to want to miss this presentation! Just a friendly reminder Sunday July 13th is the last day to sign up!

Thanks, and see you all at the July 16th Meeting!!

-Heather Reynolds
2025 SDAG President



2025 Upcoming Meetings

DATE	SPEAKER & TOPICS
July 16	Rachel Maxwell on a survey of the Mojave-Sonoran Desert Springs and their sources. <i>"Is this spring connected to that Aquifer?"</i> Hosted at the Marina Village – Catalina Room
August 20	Dr. Mario Caputo on "Newly Discovered Tetrapod Bones, Insect Trace Fossils, & Eolian Adhesion Structures- Upper Pennsylvanian Wescogame Formation, Supai Group, Grand Canyon, Arizona
September 26-28	SDAG Annual Field Trip, San Andreas Fault in the Wrightwood area, Transverse Ranges (no meeting this month)
October 15	Todd Wirth on "First report of marine invertebrate megafossils from the Eocene Mount Soledad Fm at Tourmaline Surfing Park"
November 19 SDAG/AEG-IE Joint Meeting	Eldon Gath on "San Joaquin Hills, Santa Ana Mountains, Puente Hills, and the Whittier fault: The final(?) grand theory of Orange County's tectonic geomorphic evolution"
December 17	Traditional Holiday Celebration at the San Diego Natural History Museum with Tom Deméré

VOLUNTEER OPPORTUNITIES

If you are interested in the structure of SDAG/SDGS, serving as a SDAG Officer, or serving as a Director, please see attachment at the end of the newsletter.

Current SDAG Officer Opening 2025 Vice President

If you are interested in serving as the 2025 SDAG Vice President, please contact the current **SDAG President Heather Reynolds**
heather@sandiegogeologicalsociety.org

If you are interested in any future positions on the Board of Directors, or if you have any questions about the Board, you can contact **Diane Murbach**
diane@sandiegogeologicalsociety.org



SAVE THE DATE

UPCOMING FIELD TRIPS

2025 SDAG Field Trip

Sept 26–28

Don't miss your chance to explore the **San Andreas Fault** with expert geologists in the beautiful **Transverse Ranges**!

Deadline to register:

Friday, September 5 (or when full!)

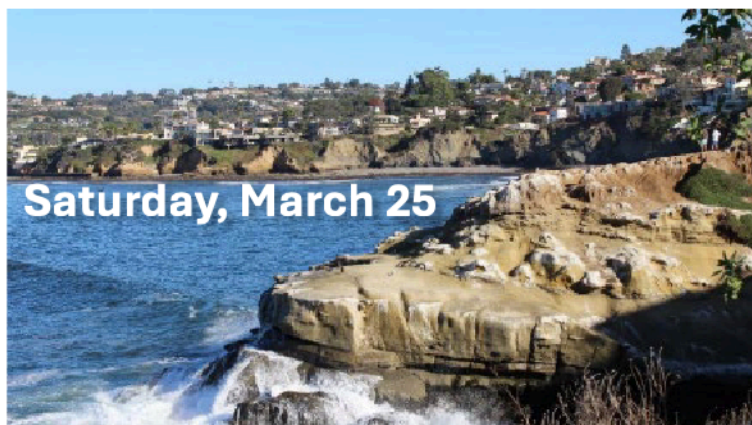
Registration form attached with full details

Pay via PayPal (QR code on form, pg 3)

Email your completed form, signed waiver & payment confirmation.

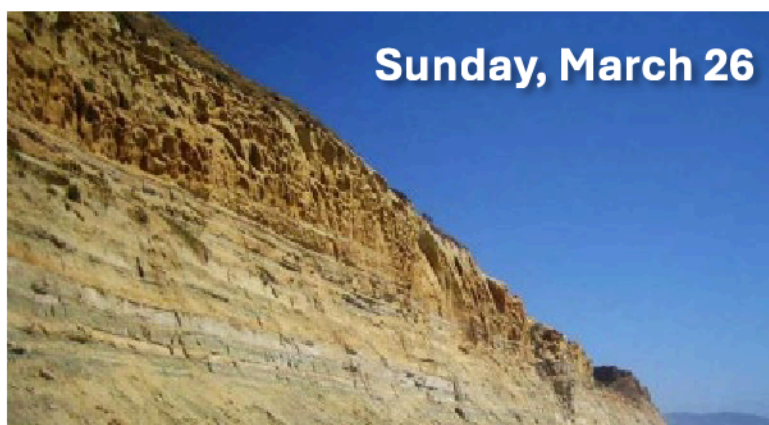
PACIFIC SECTION SEPM FIELD TRIP | 25-26 APRIL 2026

Trip leaders: Pat Abbott with co-leaders Ron Kies & Bill Bartling



Saturday, March 25

Examine all phases of a SUBMARINE FAN in beach cliff exposures of Late Cretaceous (Campanian) strata in La Jolla and Pacific Beach, California. We will “wade through” Cretaceous 1) tidal-channel deposits, 2) see dramatic deepening from 1m to 1km deep water, then take close-up looks at 3) basin plain, 4) outer submarine fan, 5) mid-fan, and 6) inner-fan valley strata.



Sunday, March 26

Walk below 100m high cliffs along Torrey Pines Beach in La Jolla. Examine Eocene lagoonal and tidal-flat deposits that are cut by the north wall of an Eocene SUBMARINE CANYON. Continue walking south and see the lateral coarsening of sediment infill as a prograding alluvial fan delivered ever-coarser sediments into a widening submarine canyon. Added bonus of Paleocene/Eocene Thermal Maximum strata.



SDAG | June Meeting Recap

THANK YOU TO THOSE WHO CAME OUT!

We know El Adobe in San Juan Capistrano isn't the most convenient venue, so we sincerely appreciate all our members who braved the afternoon rush-hour traffic to attend Dr. Miles Kenney's presentation on faulting in the western Hollywood basin and surrounding region.

A big thank you as well to SCGS for helping us host a successful joint meeting — we look forward to collaborating with you again next year!



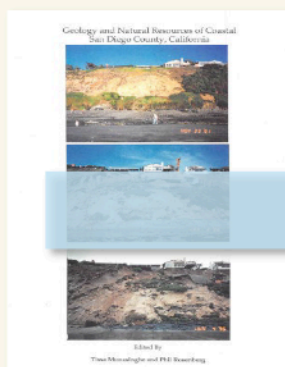


SDAG | Publications

*The **SDAG publication page** includes links to in stock books we sell thru Sunbelt Publications, out of stock books we sell thru Google Play Books, and out of stock books that we provide free as scanned copies to download.*

FIELD TRIP GUIDES & RESEARCH REPORTS

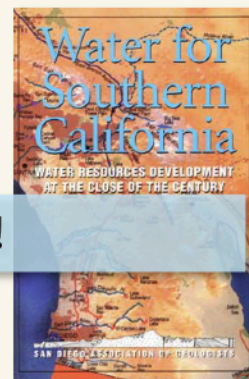
Now available as eBooks!



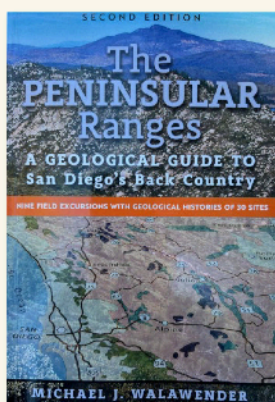
Geology And Natural Resources Of Coastal San Diego County, CA (1996)



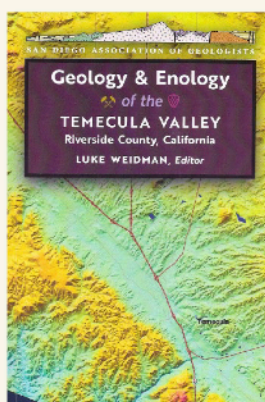
Geology And Geothermal Resources Of The Imperial And Mexicali Valleys (1998)



WATER FOR SOUTHERN CALIFORNIA: Water Resources Development (1999)



The Peninsular Ranges: A Geological Guide to San Diego's Back Country 2nd Edition



Geology & Enology of the Temecula Valley Riverside County, California 2nd Edition



On the Manner of Deposition of the Eocene Strata in Northern San Diego

FREE GUIDES AVAILABLE FOR DOWNLOAD

- [1972 Otay Mesa](#)
- [1977 SW San Diego](#)
- [1978 Coronado Islands, BC](#)
- [1979 San Diego Region](#)
- [1987 Julian Gold](#)
- [1981 Geologic Investigations of the San Diego Coastal Plain](#)
- [1982 Geologic Studies in San Diego](#)
- [1985 Eocene in San Diego](#)
- [1989 Fault Features: La Jolla - Ensenada](#)

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Lore of Northern Anza-Borrego Desert Region**



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SDAG OFFICERS /SDGS BOARD OF DIRECTORS - VOLUNTEER OPPORTUNITIES

If you are interested in the structure of SDAG/SDGS, serving as a SDAG Officer, or serving as a Director, please read the information that follows. SDAG currently has an Officer position opening for a 2025 Vice President.

In the fall of 2008, a group of the SDAG past presidents formed a Board of Directors to create a non-profit corporation. This new organization was created as a 501(c)(3) non-profit Corporation. Once the San Diego Geological Society, Inc. (SDGS) was created, the SDGS Board formed a standing committee of SDAG Officers and members. On February 7, 2022, SDGS recorded a fictitious business name statement, doing business as (dba) SDAG. The benefits of a 501(c)(3) Nonprofit Corporation Status are: Profits are exempt from corporate income tax and qualify for other tax exemptions; Proper management of SDAG publication sales and sales tax reporting (Field Trip Guide Books; Short Courses); Individuals can make tax deductible contributions (ex. Sponsors, Scholarships, books, or other donations); Can obtain better rates on event liability insurance for events (ex. Meetings, Field Trips); Personal liability protection for officers and organization as a whole (ex. Field Trips, One Stop Wonders); Allows a legal structure that helps to expand our activities (ex. Educational trips); and Tax-exempt status is required for many public and private grants (Future opportunities). SDGS has a broader "public" scope as a non-profit. SDGS also well reflects what SDAG does, i.e., publish geological books, support students with scholarships, lead field trips, and organize other activities of a public and educational nature. The structure of the SDAG/SDGS organization is:

San Diego Geological Society, Inc. (SDGS) CA Public Benefit Corporation IRS Non-Profit 501c3 as a Public Charity		San Diego Association of Geologists (SDAG) A Committee of SDGS - dba SDAG	
SDGS BOARD OF DIRECTORS 2-year term elected: July 1-June 30: Manage Corporate Affairs July 1, 2024 Positions:		SDAG OFFICERS 1 year term elected: January-December January 1, 2025 Positions:	
1. President - Monte Murbach	5. Director – Todd Wirths	1. President - Heather Reynolds	
2. Vice President - Chuck Houser	6. Director – Tom Kuper	2. Vice President – VACANT	
3. Secretary - Diane Murbach		3. Secretary – Jasmine Peach	
4. Treasurer – Randy Wagner		4. Treasurer – Xiomara Rosenblatt	

See SDGS Articles of Inc & By-Laws for the Non-Profit: <http://www.sandiegogeologicalsociety.org/>

SDGS is governed by a six-member Board of Directors elected to 2-year terms, three in even years and three in odd years. The Board currently consists of those listed above. Former board members include Dave Bloom, Greg Cranham, Mike Hart, Lowell Lindsay, and Bob Stroh.

If you are interested in serving as the 2025 SDAG Vice President, please contact the current SDAG President Heather Reynolds heather@sandiegogeologicalsociety.org.

If you are interested in any future positions on the Board of Directors, or if you have any questions about the Board, you can contact Diane Murbach at diane@sandiegogeologicalsociety.org or any of the current Directors listed above. Although there are no prerequisites to be a Director, the consensus is that being a prior SDAG President provides the experience and understanding of the issues and decisions a Director will face. Other qualifications include those with legal or financial CPA experience to assist with the Corporations Non-Profit status