

Grand Junction Geological Society http://www.gjgs.org/



This Month's Presentation

Dr. Larry Meckel

L D Meckel and Company (Retired) Ouray and Grand Junction, CO

will speak on

WHERE HAS THAT <u>VAST</u> AMOUNT OF ERODED SEDIMENT FROM THE COLORADO PLATEAU (and beyond) GONE?

Meeting Time and Location

January 22, 2025

Joint meeting with the CMU Geology Students

6:30 p.m.

Saccomanno Lecture Hall (Room 141) in the Wubben Science Building at Colorado Mesa University

Note: The meeting is a week later than usual because of CMU scheduling. Also note the earlier starting time.

Zoom Details

Andres Aslan is inviting you to a scheduled Zoom meeting.

Topic: Jan GJGS meeting

Time: Jan 22, 2025 06:00 PM Mountain Time (US and Canada)

Join Zoom Meeting

https://coloradomesa.zoom.us/j/94608691519

Meeting ID: 946 0869 1519

(As usual, the Zoom meeting opens early to allow people to sign in).

Important Announcements

Happy New Year, everyone. It is time to pay our yearly dues to keep the GJGS solvent. The membership voted to raise the dues to \$25. You can pay by check to our P.O. Box (P.O. Box 4045, Grand Junction, CO 81502), in person at the meeting, or electronically through our website: GJGS.org. If the latter, please consider adding a dollar or so because we get charged for the electronic transfers.

Abstracts

WHERE HAS THAT <u>VAST</u> AMOUNT OF ERODED SEDIMENT FROM THE COLORADO PLATEAU (and beyond) GONE? Larry Meckel

I'm sure we have all asked at one time or another: "Good grief, where has all that sediment eroded by the Colorado River and all its large tributaries gone? Plus all the eroded thick units that use to cover all those eroded canyons, mesas, buttes, cliffs, and uplifts we now see." Combined, that is an amazing amount of sediment that needs to find a home. All in a relatively brief period of time. The short answer to that question is "the Colorado River deltas in various catchment basins".

We will start our story with the well-documented Holocene (Recent)--Pleistocene deltas, the Holocene one being perhaps one of the most unique deltas in the world today. Then work our way back to the depocenters for the Pliocene (also well documented) and finally to the Late Miocene (very interesting option here). That approximately 10 million year history is truly fascinating.

Interestingly, that history will lead us to the opening of transform rift basins on the West Coast (think San Andreas and related fault systems) and to the largest active geothermal resource in North America (actually in those Colorado delta sediments).

Lots of interesting concepts to explore, so fasten the seat belts.

<u>Bio</u>

Dr. Larry Meckel

Larry is a retired exploration geologist who started his career with Shell Development and Shell Oil Companies in both research and exploration. Then for 50 years he was a domestic and international consultant, having founded Sneider and Meckel Associates and then L D Meckel and Company. As a consultant, he was fortunate to be associated with various exploration teams who made significant discoveries, including the huge unconventional Elmworth Field in Western Canada. He has taught in-house courses for more than 40 oil companies and for 6 professional societies.

He ended his career as an Adjunct Professor at the Colorado School of Mines where he taught graduate level courses in Advanced Petroleum Geology and Unconventional Petroleum Systems. He now teaches continuing education classes for the OLLI Program at the University of Denver. In 2011 he was awarded the Distinguished Educator Award by the AAPG for teaching excellence and then in 2017 their highest award, the Sydney Power Award, for his contributions to petroleum geology, especially those unconventional petroleum systems.

He received his B.A. from Rice University and his Ph. D. from Johns Hopkins University. He and Barbara reside in Ouray Colorado where they have had a house for 54 years. However they now winter here in Grand Junction.