



Colorado Scientific Society – Earth Sciences since 1882

The oldest scientific society in the Rocky Mountain region

Founded in 1882, the objective of the Society is to promote the knowledge and understanding of Earth science, and its application to human needs. Samuel Franklin Emmons, 1841-1911, was “Geologist in Charge” of the Colorado Division of the U.S. Geological Survey when it was established in 1879 and was the first president of the Society. We focus primarily on earth science, welcoming members with interests in all fields of science. [Learn more.](#)

May 2025 Colorado Scientific Society Newsletter

CSS May Meeting and Emmons Lecture

Thursday, May 15, 2025 at 7:00 p.m.

**“The Consequences of the Compact Remains with Us”:
Challenges and Opportunities for the Colorado River Upper Basin**

Eric Kuhn, retired general manager of the Colorado River Water Conservation District

All are welcome – no admission charge

6:30 pm. – Come for our in-person social time

6:45 pm. – Join our online Zoom meetings

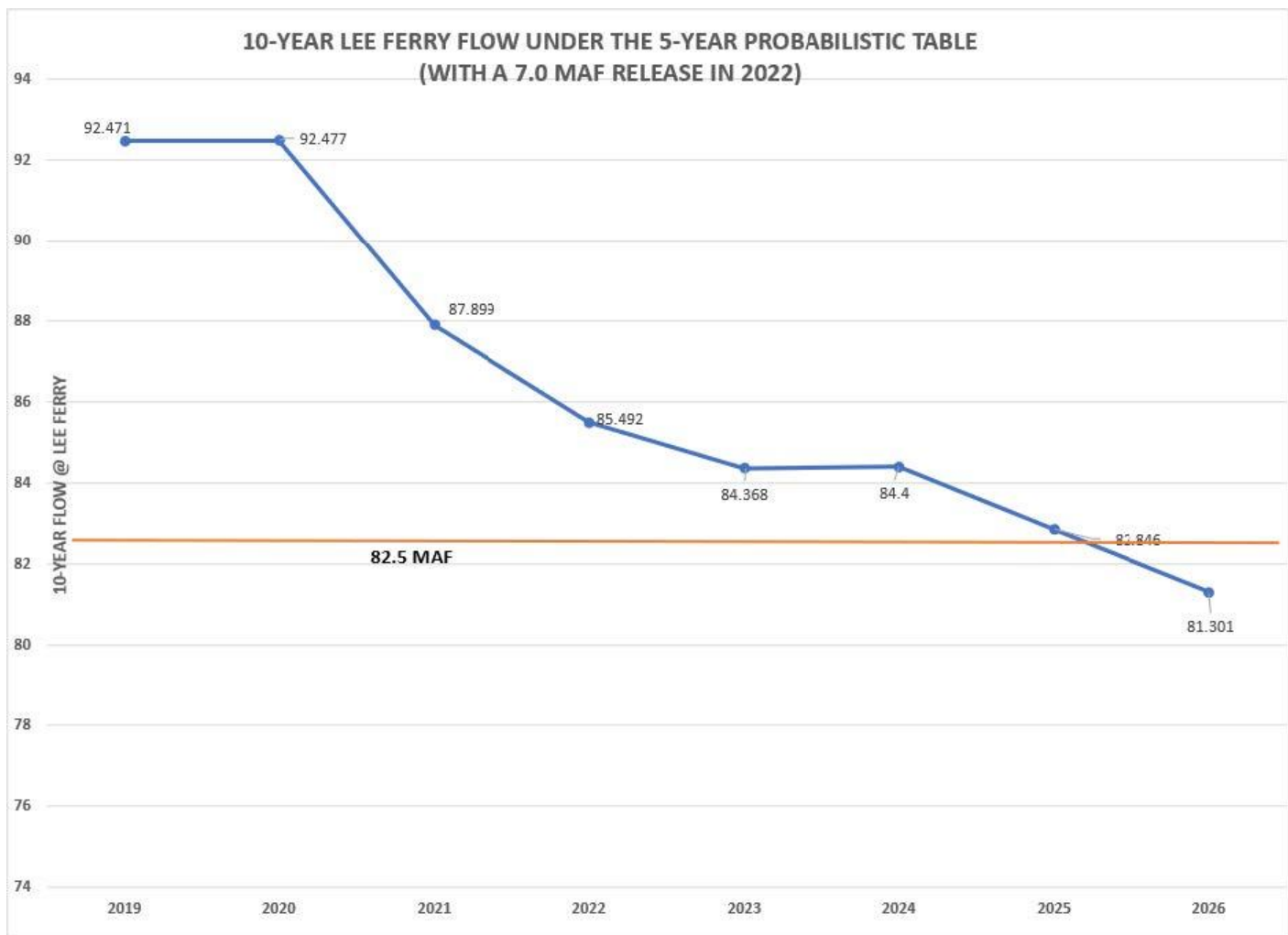
7:00 pm – Meeting and Program begin

Link to Join CSS Emmons Lecture and May Meeting via Zoom

CSS invites you to our Zoom meeting on Thursday, May 15th at 6:45 pm.

Click to Join CSS Zoom Meeting
from PC, Mac, Linux, iOS or Android

The details about attending the meeting in person at the Golden Calvary Church follow the details about the talk.



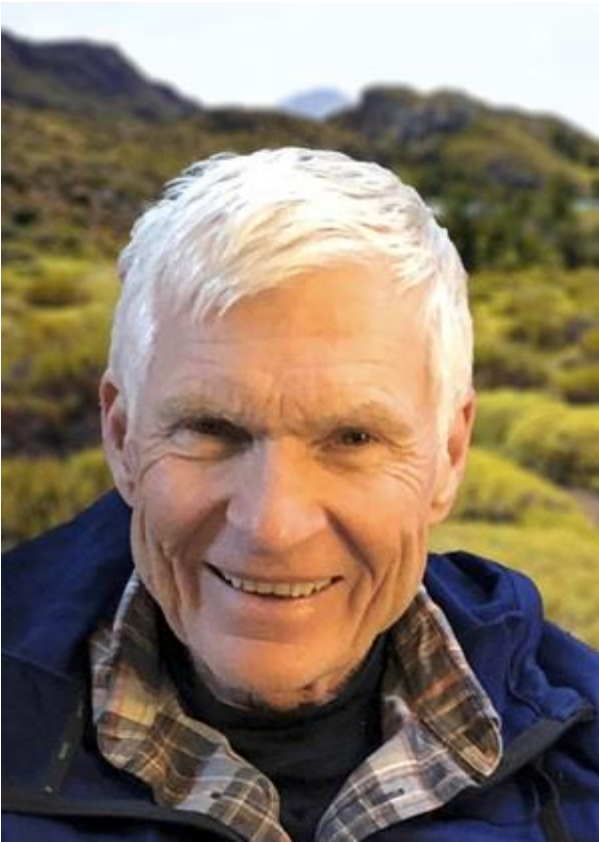
10-Year Lee Ferry Flow Under the 5-Year Probabilistic Table
(With a 7.0 MAF Release in 2022)

Abstract:

Declining Colorado River flows are exposing critical ambiguities in the “Law of the River”, the interlocking set of Compacts, statutes, and court decisions that frame management of the river and the allocation of its waters. Perhaps most important among those is an apparent conflict between Article I of the Colorado River Compact, which calls for the “equitable division” of the river’s waters, and Article III, which is interpreted as creating a firm delivery obligation of water from the river’s Upper Basin to the Lower Basin. This apparent conflict has been papered over for decades with surplus water deliveries, but with climate change depleting the flow of the river, we are approaching a point where that is no longer possible, and a continuation of current practice would place the bulk of the burden of responding to climate change on the Upper Basin. That would hardly be “equitable”. We argue this places a burden on the Upper Basin to choose among a narrow set of paths forward – 1) continuing with the status quo in hopes of negotiating more favorable near-term rules, 2) taking a hard line with the attendant risk of litigation, or 3) seeking a more equitable long term agreement.

Keywords: Colorado River, Colorado River Compact, demand management, curtailment, Upper Basin obligations, water conservation

Download *Science Be Dammed Working Paper Number 3*, Kuhn, Eric and Fleck, John, from:
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4094375



Eric Kuhn

Biography: Eric Kuhn is the retired general manager of the Colorado River Water Conservation District and co-author with John Fleck of *Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River*, University of Arizona Press, 2019.

The Colorado River District is the largest and oldest of Colorado's four conservation districts. It covers most of the Colorado River Basin within Colorado. Almost two thirds of the flow at Lee Ferry originates in or flows through the district. Eric started employment with the Colorado River District in 1981 as Assistant Secretary-Engineer. In 1996 he was appointed General Manager, a position he held until his retirement in 2018.

From 1994 through 2001, he served on the Colorado Water Conservation Board representing the Colorado River mainstem. Eric served as an at-large representative on the Colorado Inter-basin Compact Committee, from 2005 – 2018. He also served on the Engineering Advisory Committee of the Upper Colorado River Compact Commission from 1982 -2019. Prior to working for the Colorado River District, he served as an engineer officer aboard nuclear submarines in the U.S. Navy and worked as a nuclear start-up engineer for Bechtel Power Corp. In addition to *Science Be Dammed*, a book about Colorado River hydrology and politics, Eric has authored or coauthored numerous other articles and papers about the Colorado River.

Research Interests: How climate change is impacting the operation of the major Colorado River system reservoirs and the rules and laws that govern Colorado River water use. How our understanding of the hydrology of the Colorado River has evolved with the law of the river.

Flyer for Colorado Scientific Society talk on May 15, 2025 by Eric Kuhn: "The Consequences of the Compact Remains with Us: Challenges and Opportunities for the Colorado River Upper Basin"

In-person Meeting at Golden Calvary Church

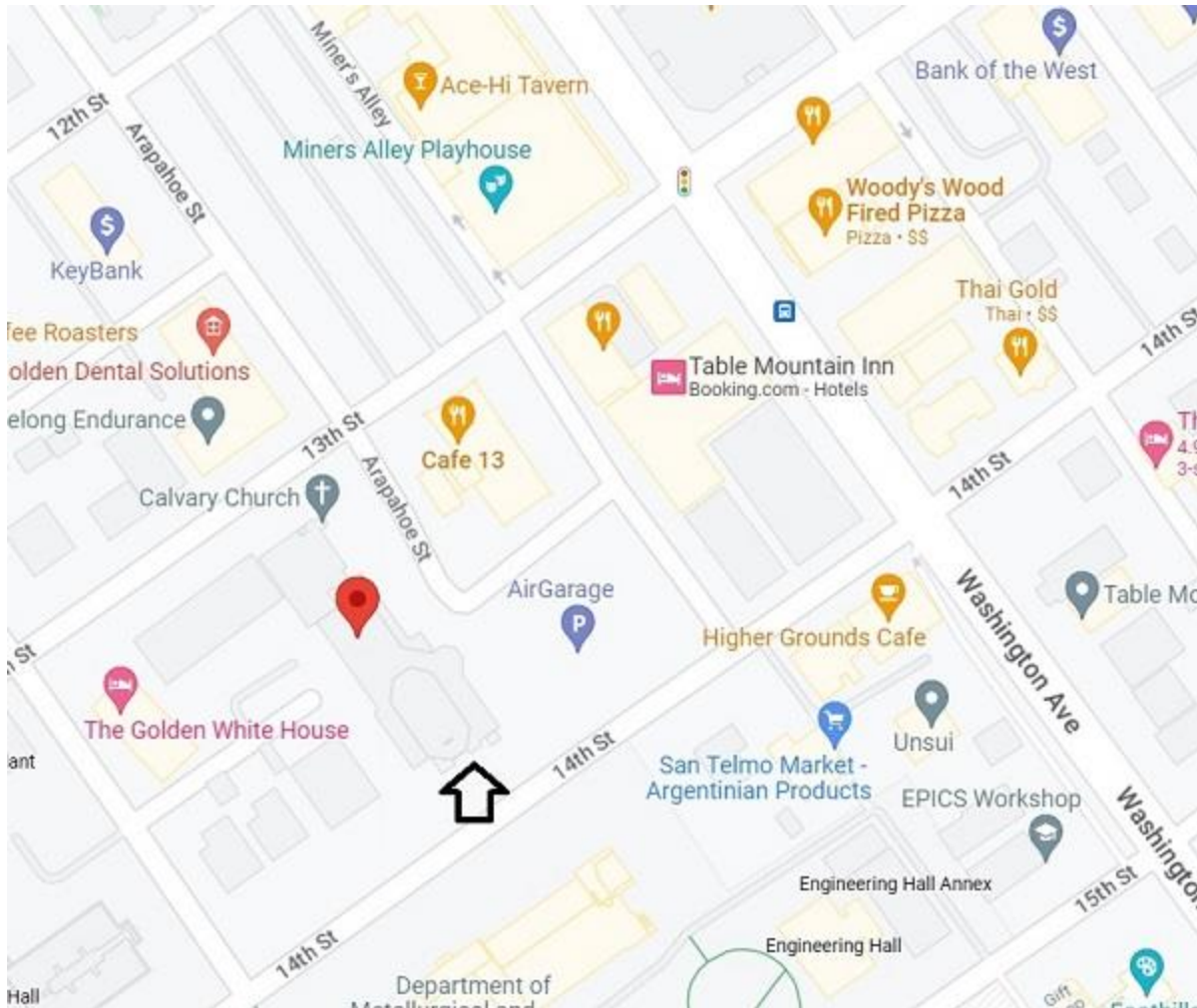
All are welcome – no admission charge

6:30 pm – Social time begins at Golden Calvary Episcopal Church. Enter off 14th St.

6:45 pm – Join Zoom meeting, if attending remotely

7:00 PM – Meeting starts.

Please arrive early. Church doors are locked, and **no one will be at the door to let you in after 7:00 pm.**



Golden. Enter at arrow on map.

[1320 Arapahoe St, Golden, CO 80401](#)

Click on link to open a Google map.

Enter off 14th St., going in via the main glass doors on 14th St.

Do **not** enter the old church above 13th St.

Go through building following the CSS signs to the Community Rooms 1 and 2, where we meet.

The church doors must stay locked, and we will have a person to let you in at the doors off 14th st.

They want to see the presentation too, so **please arrive before 7:00 pm.**

There will be a phone number that you can text to be let in if you arrive late.

Parking On street parking is available close by, west of Washington Ave in downtown Golden.

The AirGarage parking structure, which can be entered from Arapahoe St., is \$3.00 for three hours.

Copies of *The Geology of Boulder County* by Raymond Bridge (2004) will be available at our meeting for \$20.

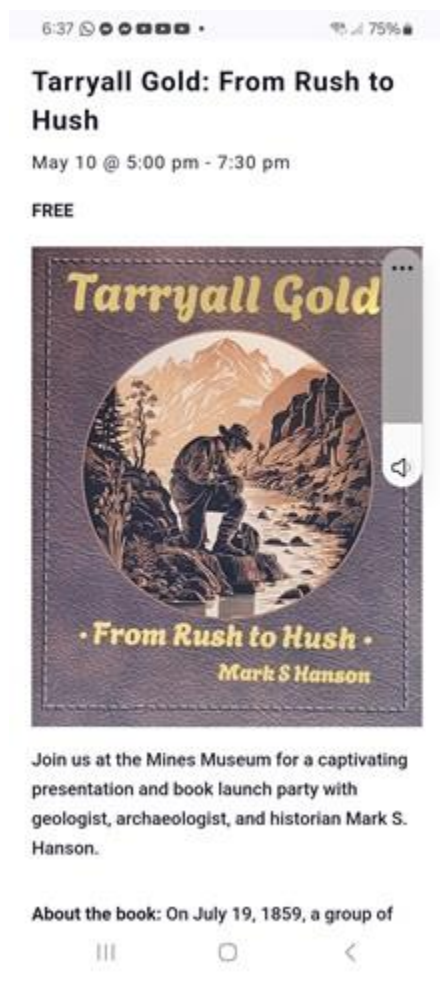
Past Presidents' Dinner

Tarryall Valley: Gold, Glaciers, and Giants

Thursday, September 18, 2025

Mark Hanson

Mark Hanson is a geologist, historian, and author of the upcoming book ***Tarryall Gold: From Rush to Hush***. He profiles the miners, mines, cabins, and their resulting patina on today's Tarryall Valley. A resident and owner of several patented gold claims, Mark peels back 160 years of rust and reforestation to reveal a time capsule showcasing yesterday's rush, and today's hush.



Tarryall Gold: From Rush to Hush, by Mark Hanson

CSS October Meeting – Details to come

Thursday, October 16, 2025

Joel Gratz, Open Snow

Open Snow is a weather forecasting and snow conditions information service.

CSS November Meeting – Posters and Lightning Talks by Early Career and Student Earth Scientists

Thursday, November 20, 2025

CSS December Potluck, Business Meeting, and Past President's Address

Whiskeytown boulder sampling to elucidate wildfire history and role in debris flows using luminescence

Thursday, December 11, 2025

Shannon Mahan, U. S. Geological Survey

Field Trips and “No Moss” short field trips: *To Be Announced*



Click to Join or Renew your
Colorado Scientific Society
Membership

Please pay your CSS dues for 2025!

You may pay dues online or print out a PDF of the membership form and mail it to us with a check. Continuing your membership in CSS will enable us to continue all our ongoing programs, including our field trips, virtual meetings, Student Research Grants, and more.

See [Membership and Donations](#) for the CSS membership PDF and our online membership payment form.

Regular CSS Membership is \$25;

Student Membership, \$5;

Life Membership, \$395.

Send your membership payment, if not done through [our online membership payment form](#), to Colorado Scientific Society P.O. Box 150495 Lakewood, CO 80215-0495.

Thank you!

New and renewal memberships in November and December are also good for the next year.

[**Read past Colorado Scientific Society Newsletters**](#)

[**Archive of Past Colorado Scientific Society Meetings
Including video recordings of most meetings**](#)

About the Colorado Scientific Society

The Colorado Scientific Society was founded in 1882 as a forum for the exchange of observations and ideas on the topics of earth science. Lecture topics largely focus on earth science, and are open to the public. In addition to our monthly lecture series, the society is also active in public service. We fund student research grants, construct and post signs that describe local geologic features, and organize and lead field trips.

The Colorado Scientific Society normally **meets on the third Thursday of the month from September through May**. (In the summer months of June-August, too many members are out in the field.)

6:30 – Social time at in-person meetings

6:45 – Join Zoom meetings

7:00 – Meeting and Program begin

Election of 2025 officers took place at our Dec. 3, 2024 Annual Meeting. The final slate of our 2025 officers and Councilors is:

President – **Shannon Mahon**

Secretary – **Patrick Sullivan**

Treasurer – **Jim Paces**

Past President – **Jeff Pigati**

President-elect (to become president in 2026) – **Amy Atwater**, Director of Paleontology at Dinosaur Ridge

Councilors: 2023-2025: **Michael Frothingham**

2023-2025: **Kassandra Lindsey**

2024-2026: **Nate Rogers**

2024-2026: **Susan Slomski**

2025-2027: **Lisa Rukstales**

2025-2027: **Adam Hudson**