

GIS Colorado Fall Meeting October 20-21, 2022 Alamosa, Colorado



Thursday October 20, 2022

9:00 am - 4:00 pm [1.5 hour lunch break] — Educational training in partnership with Adams State University (ASU). Dr. Chayan Lahiri, ASU Geology Professor will lead us on a tour of ancient Lake Alamosa in the morning. In the afternoon we will visit the Great Sand Dunes National Park and Preserve for a presentation by Andrew Valdez on GIS applications at the National Park.

Meeting Location: On the Adams State University campus, 208 Edgemont Blvd, Alamosa: park at the Plachy Lot on Stadium Drive adjacent to the High Altitude Training Complex. Here is a link to the parking location.





Friday October 15, 2021 Society Hall, 400 Ross Ave, Alamosa, Colorado

8:30am - 9:30 am — Welcome! Coffee & Light breakfast provided by our Sponsors!

9:30 - 10:00 am — Announcements & Introductions

10:00 - 11:00 am — Lume Machina: VFX to GIS, Mark Bellncula, Bell & Koola Studio, mark.bellncula@gmail.com Abstract: My personal journey from a VFX pro to GIS, via my continuing art project Lume Machina. I will speak about how collecting GPS data with a consumer Garmin device, back in 2008, led to a creative breakthrough. I will detail how I got my specialized GIS tool "La Machine" made as I demonstrate the workflow for a complete project, from working in a pro VFX program to a final flight path ready to upload to a sUAS. I will also detail the process of capturing one of my flights/performances with a little BTS post image processing. This work led me right to this place and I would like to share that story. With nearly 30 years of experience in the design and advertising industry, Mark is the director and motion designer of Bell & Koola Studio.

11:00 - 11:15 am — **Combining Software in Lithium Exploration,** Stefanie Von Flue, RESPEC, sm.vonf06@gmail.com

Abstract: This presentation examines the use of GPS, Google Earth, ArcGIS, and AutoCAD to examine the Arizona desert for potential lithium sources for a client. Driven by the US's desire for clean energy in the future, reduction in greenhouse gasses, and dependence of foreign commodities, the potential of lithium is getting a second look. This desire to move to a cleaner energy source has many mining companies looking at lithium in a new light. Currently, the lithium supply is largely led by Chile and Australia. While the US is looking to become a more-dominant player in the lithium supply chain, it plans to source it from ally countries instead of mining domestically. Incorporating the various tools and software, this presentation discusses the process used in the field to gather data and explore the potential of future lithium exploration in the Arizona desert. Stefani, an engineering technician with almost 20 years' experience supporting the mining, civil, and geological engineering consulting industry, works for RESPEC in Grand Junction.

11:15 - 11:30 — An introduction to the USGS GeMS Geologic Map Database Schema, Caitlin Bernier, Pangaea Geospatial, cbernier@pangaeageospatial.com

Abstract: With the advent of the National Geologic Map Database, the need for a standardized geologic map database schema was made apparent early on. The USGS began working on a standardized schema in 2009 and the latest version of the schema, titled GeMS, was officially adopted in 2020. The Colorado Geological Survey has been learning and utilizing the GeMS standard since 2019 in order to standardize the STATEMAP products. This talk will go over the history of the GeMS schema, the reasoning for it, and the pros and cons of using it for STATEMAP projects. Caitlin, the owner of Pangaea Geospatial, is a certified GIS Professional with over 30 years of experience in applied technologies for geologic and environmental scientists, planners, politicians, small business owners, rural water and wastewater operators, and citizens.

11:30 - 11:45 am — **Practical (and affordable) GIS Wayfinding Design,** David "Barney" Barnett, Bristlecone-Geo, dbarnett@bristlecone-geo.com

Abstract: Wayfinding is an information system that guides people through a physical environment, helping to enhance their understanding and experience of the space. This flash presentation will introduce one practical and affordable geospatial driven solution. David is a certified professional geologist, geospatial analyst, and cartographer having over 30 years of professional experience in geoscience, geomatics, and geographic information science (GIS).

11:45pm - 1:00 pm Networking Lunch provided by our Sponsors!

1:00 - 2:00 pm — Overcoming Challenges of Embracing Subscriptions Services for Trimble Catalyst GNSS, David Siddle, Frontier Precision, david@frontierprecision.com

In depth discussion including organization information, cost analysis benefits, implementation struggles, and lessons learned of the industry shift to subscriptions services.

• Local government: "we don't do subscriptions" • Small businesses: "does not fit our business model" • Large businesses: "we prefer capital expenditures" This presentation will present comparisons of capital expenditures to subscription services, including scalable vs fixed accuracy, project management flexibility, reporting, and analysis. Dave is Frontier Precision's Geospatial Mapping Representative for Colorado and Wyoming, and a supporter of all things GIS, utilities, asset mapping, mobile mapping and a long-time champion of GIS Colorado!

2:00 pm — Wrap Up

Training & Meetup Sponsored By:



