

# Issue 1

Spring 2020

# **Issued Quarterly**

Newsletter of the Rocky Mountain Region, serving Montana, S. Idaho, Wyoming, Utah, Colorado, & New Mexico

# The Rocky Mountain Region has Grown! Welcome New Members!!

We want to extend a warm welcome to all our new members, and especially to the 28 folks in Idaho and Utah who have been re-assigned to the Rocky Mountain Region after the recent dissolution of the Intermountain Region. (See more on this is in the National Director's Report.) So welcome aboard, all of you, and please let us know if you would like to be more actively involved with guiding the Region.

> Josip Adams Jamie Allen Lawrence Beals Joshua Daniel Carrell Georgios Charisoulis Adam Collins Andrew Collins **Brian Connolly** Amanda Drinkard Brvan Ford Abigail Gettinger Dorcas Oluwabimpe Idowu Jason Jung Anneliese Lilje Eric McNeill Marc Miller Joshua Noel Susan Ann Hunter Norman Megan M. Ovenden **Keith Peterson** Gert Riemersma Kevin Reid, CP Eli James Rodemaker Jason Rogers Kevin Sacca Chris Schaefer **Charles Roibert Staton** Andre Tapadinhas **Emma Thomas** Sarah Weidler Mathew Guy White

## Student Scholarships Awarded

The Rocky Mountain Region is proud to announce our two student scholarship winners for the 2019-2020 program. Lawrence Beals, a Masters Degree candidate at Colorado State University in Fort Collins, Department of Anthropology and Geography, was awarded \$1,000 in the Masters Degree category. He is researching sites in Mexico, Honduras and Columbia to determine how LiDAR density patterns affect our ability to differentiate archaeological features on the landscape using the LiDAR datasets from that area. Lawrence is also exploring how to effectively merge Unmanned Airborne Vehicle (UAV) and airborne LiDAR datasets. This is part of an ongoing initiative he is spearheading to reduce research data acquisition costs and ensure data is of sufficient quality to support the research efforts in the Center for Archaeology and Remote Sensing (CARS) laboratory at CSU. He hopes to go on to pursue a Ph.D. and research how complex societies have dealt with collapse scenarios brought on by resource depletions or external pressures, specifically looking at what lessons can be learned and applied to the current climate change issue. Lawrence Beals plans to pursue a career as an Archeologist.

Applications from Masters Degree candidates were assessed by a review committee in 9 areas: appropriateness of field of study, quality of narrative, communication, letter of recommendation, enthusiasm, scholastic ability, extracurricular activity, quality of research, and appropriateness of research. Ph.D. candidates were also assessed in all of the above areas, plus uniqueness of research, and innovation of research.

Georgios Charisoulis, a Ph.D. candidate at the University of Colorado in Boulder, Department of Geography, was awarded \$1,5000 in the Ph.D. category.

Georgios is using Boulder County as a study site to research suitability modeling of renewable energy facilities, specifically, biogas anaerobic digestors, near rural farms. Anaerobic Digestion (AD) breaks down organic waste (e.g., crop waste or manure) by means of fermentation within a digester to produce natural gas. AD has not been widely incorporated into energy systems in the United States, but is more commonly used in the European Union.

Georgios' work addresses an important problem that has long challenged location-allocation modelers in the geospatial sciences, namely, how to site public or private facilities within specific community constraints when data for source or target locations are not available. His goal is to establish robust location models of known reliability when data are aggregated or missing. A second important contribution of this research is the refined spatial search strategy afforded by the Archimedes Spiral. This search methodology is innovative in allowing for systematic compartmentalization of space and prioritization of specific sub-regions within a study area. An extensive search of published literature shows that this type of spatial refinement has not been applied to location-allocation modeling, and so evaluating this search strategy can inform expectations about processing times as well as improvements in the accuracy of selected site locations. A third contribution of this research is in working with open-source data and software code, following best practices of reproducible science.

The Board of Directors of the Rocky Mountain Region wants to congratulate **Lawrence Beals** and **Georgios Charisoulis**, our scholarship winners, and wishes them much success in their future research and career endeavors.

# **National Director's Report**

#### National ASPRS Update (January to May 2020)

Due to continuing uncertainties and safety concerns related to the COVID-19 pandemic, ASPRS has made the difficult decision to withdraw from the Geo Week 2020 face-to-face event currently scheduled July 27-29 at the McCormick Center in Chicago, Illinois. We are offering *all presenters originally accepted for the March event in Washington, DC* the opportunity to

### **Rocky Mountain Compiler**

share their work in the **ASPRS 2020 Annual Conference Virtual Technical Program**, a series of online technical sessions during the week of June 22–26, 2020.

Because the **ASPRS 2020 Annual Conference Virtual Technical Program** is being hosted, organized, and managed by ASPRS alone, there will be a new, separate registration process and fee for all presenters and attendees. *Existing Geo Week 2020 conference registrations are NOT TRANSFERABLE to this new ASPRS event.* See <u>http://conferences.asprs.org/geoweek-2020/</u> for more information.

#### **ASPRS Region Mergers**

The Region Officers Council (ROC) in February proposed a recommendation to the ASPRS Board of Directors related to the dissolution of the Intermountain Region. After a vote put to existing Intermountain members in March, the ROC determined in April that there would be a split of Intermoutain between Cacasdia and Rocky Mountain Regions. Counties in "Northern Idaho" were assigned to the Cascadia Region, while the remainder of Idaho and all of Utah were assigned to the Rocky Mountain Region.

Some may recall that the Colombia River and Puget Sound Regions were merged into a single Region called Cascadia during 2019.

As part of the Intermountain Region reassignment and based on the number of members going to each respective territory, the Intermountain treasury disbursement was split this way:

- ♦ Cascadia: \$794.64
- ♦ Rocky Mountain: \$7,416.65

#### **Sustainability of Regions**

The Region Officers Council will continue to monitor the activities within each of the Regions of ASPRS to assess the health and sustainability of each Region and provide assistance to a Region's leadership when needed.

A Region will be considered inactive if one or more of the following have occurred: (1) no representative from the Region has participated in a ROC meeting or conference call in more than one year, (2) no election of Region leadership has occurred within one year, and/or (3) ASPRS is unable to contact the last known Region President or other officer within five attempts by email or telephone. In the event that a Region has become inactive, the ROC will seek to identify potential leadership within the Region to help revitalize the Region.

If efforts to revitalize the Region fail, the ROC will recommend that the ASPRS Board of Directors dissolve the Region and assign their territory to an adjoining Region.

#### **Terry Ryan**

National Director, ASPRS RMR

## **President's Message**

Farewell to my friends at ASPRS RMR,

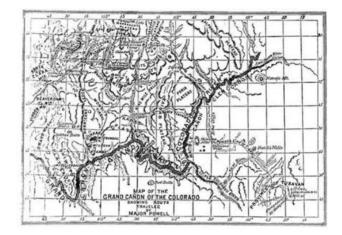
I have embarked on a new journey... As some of you may know, I resigned from LizardTech (now Extensis) last September 2019, after accepting a position with PAR Government Systems as Director of Sales and Marketing for a newly formed Product Innovation Division. As a result of expected demands on my schedule, I am not able to continue on the ASPRS Rocky Mountain Region (RMR) Board of Directors in 2020. Yes, it's time for me to "Move On Down The Road" (as performed by Canned Heat https://binged.it/2LohmFT).

It has been a great professional experience to serve the ASPRS Rocky Mountain Region in various capacities over the last several years. I am grateful for the knowledge gained and the friendships that have been cultivated. I am ascending to a great career-related, geo-practitioner engagement at PAR Government and I expect to maintain a geospatial consulting practice -- Geographic Imperatives LLC -and pursue a few non-profit endeavors of personal and professional interest.

I will continue my involvement with the GIS in the Rockies Board of Directors during 2020. And I would encourage any of you to step up and help with leadership of the ASPRS Rocky Mountain Region, if you are so inclined. I think you will find it very rewarding, as I did.

I leave you with the words of John Wesley Powell, second Director of the US Geological Survey, regarding the Powell Geographic Expedition's threemonth journey down the Green and Colorado Rivers, including the Grand Canyon, back in 1869: "...We have an unknown distance yet to run, an unknown river to explore. What falls there are, we know not; what rocks beset the channel, we know not; what walls ride over the river, we know not... Ah, well! We may conjecture many things..."

Goodbye for now, Jeff Jeffrey M Young, Geographer Past President, ASPRS Rocky Mountain Region jeffreymyoung@msn.com 303-815-2254





A postscript: If you travel to Colorado, ... "well come see a fat old man [named Young] sometime" (a paraphrase of Rooster Cogburn's final dialog in <u>*True Grit*</u>, 1969.)

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# **GIS in the Rockies Conference**

33rd Annual "GIS in the Rockies" Conference October 8-9, 2020

#### **Conference Website**

Due to COVID-19 and restrictions on large gatherings, the 2020 GIS in the Rockies is now planned as a virtual event on October 8 and 9 (the originally scheduled dates).

We carefully evaluated numerous possible adaptations for an in-person conference but concluded there is no responsible way to host such a large gathering. We'll truly miss seeing everyone in person this fall, but our community's health and safety is obviously the top priority.

Please continue to save October 8 & 9 for GIS in the Rockies. We're finalizing plans for a virtual event and will be in touch soon with details and registration information. In the meantime, stay healthy and best of luck through this pandemic.

PS. We're planning a return to an in-person conference in 2021!

Questions about GIS in the Rockies? Email chair@gisintherockies.org

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## **About GIS in the Rockies:**

GIS in the Rockies is the Rocky Mountain West's premier geospatial information and technology conference. The conference offers opportunities for industry professionals to learn more about geospatial technology issues and business-centric strategies supporting every vertical market touched by the geospatial industry. Historically, attendees have included representatives from local, state, and federal government, the utilities industry, environmental services, land surveying professionals, the oil and gas industry, students, educational practitioners, and retail and business marketing professionals. Whether you are a seasoned GIS professional or are new to the industry, GIS in the Rockies Conference will offer industry insights and opportunities for everyone.

Local chapters of the following member professional societies are involved in conference planning: <u>American Society for Photogrammetry and Remote</u> <u>Sensing (ASPRS), GIS Colorado (GISCO),</u> <u>Professional Land Surveyors of Colorado (PLSC), and</u> <u>Urban and Regional Information Systems Association</u> (URISA).

The conference is organized by the GIS in the Rockies Planning Committee. The planning committee generally consists of volunteer GIS professionals who currently work in the industry, although the committee is not limited to GIS professionals. If you are interested in joining the planning committee or have questions about the committee, please <u>contact us.</u>



## GeoBytes

GeoBytes are online seminars presented by ASPRS and sponsored by the ASPRS GIS Division, in cooperation with AAGS and CaGIS.

Attention those seeking ASPRS Certification: ASPRS Online Seminars are a great way to gain Professional Development Hours! <u>Click here to</u> <u>learn more</u>

#### **Upcoming GeoBytes Seminars**

Digital Twin of a Utility: GIS, AI, HPC, and Automatic Building Energy Modeling (AutoBEM) Software Presenter: Joshua Ryan New Scheduled: June 5, 2020

# ASPRS Rocky Mountain Region Rebate Offer for Students

ASPRS Rocky Mountain Region will reimburse \$25 of the \$50 cost of student membership, so your net cost is only \$25 for all the benefits of membership in the Society!

Download the Student Membership Rebate Form at <u>http://www.asprs-rmr.org</u> (on the Student Chapters page). Here's the best part: *This offer from the Region is good for every year you are a full-time student!* 

# National ASPRS Student Advisory Council (SAC) Looking to Fill Positions

If you are a student and are interested in either the **Deputy Chair** or **Communications Councilor** position with the SAC, please email office@asprs.org.

# **Tech Tours, Social Networking?**

Let's get to know each other better! Be on the lookout for **Technical Tours** and **Social Networking Events** (aka Happy Hours) coming up, (in virtual mode for now). We encourage those of you in all areas around **Idaho**, **Utah**, **Montana**, **Wyoming**, **New Mexico** and **Colorado** to organize your own get-togethers. Got an idea for an event in your area? Contact us with ideas, suggestions, or questions, and we can help you organize an event. Let's plan something soon! Sheila Pelczarski Communications Director, ASPRS Rocky Mountain Region news@asprs-rmr.org

# Time for YOU to Get Involved???

Help us to "steer the ship" and lead the Region forward -- contact any officer listed on the website (see Officers page) for more info.

Rocky Mountain Region Website Contact the Rocky Mountain Region Important News from National:

# Executive Order 13905 --Strengthening National Resilience Through Responsible Use of Positioning, Navigation, and Timing Services

https://www.federalregister.gov/documents/2020/02 /18/2020-03337/strengthening-national-resiliencethrough-responsible-use-of-positioning-navigationand-timing

In support of this Executive Order, The National Institute of Standards and Technology (NIST) is seeking information about public and private sector use of positioning, navigation, and timing (PNT) services, and standards, practices, and technologies used to manage cybersecurity risks, to systems, networks, and assets dependent on PNT services.

### **New Information from NIST:**

"On February 12, 2020, President Trump signed the <u>Executive Order on Strengthening National</u> <u>Resilience through Responsible Use of Positioning,</u> <u>Navigation, and Timing Services</u>. The order seeks to ensure that the nation's critical infrastructure, such as energy, financial and transportation sectors, are resilient to disruptions in GPS or other sources of PNT, including time signals sent over the internet. The Executive Order directs the Department of Commerce (that includes NIST) and other agencies to work with the private sector to identify and promote responsible methods of using PNT services that appropriately manage risks.

NIST is now working to provide guidance in the form of a Cybersecurity Framework (CSF)-based "profile" to help organizations make deliberate, risk-informed decisions on their use of PNT services. We are planning to record a webcast later this month to explain more...but we'd love to hear your questions ahead of time. Please submit questions via pnteo@list.nist.gov or on Twitter using the hashtag #NISTPNT by 5/21. We will answer them during our webcast, which will be released on June 4th at 2PM EST."

### Webcast information can be found here:

https://content.govdelivery.com/accounts/USNIST/b ulletins/28b9795