New logo!
New website!
New opportunities!

Learn more about future forest fires in Colorado, p. 6

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The Board usually meets the second Tuesday of each month at 7:00 AM; all members are invited to attend. Please contact a Board Member to confirm time and location.

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The Colorado Section of AIPG newsletter welcomes submission of technical or informational articles for publication. Articles may be submitted via e-mail to the editor at:

stephanie.e.ashley@gmail.com
(Microsoft Word format is preferred.)

Contact Stephanie at 303-215-0942 for additional information.

Change of email:
Change of email notices and other contact information changes for the CPG should be sent directly to:

AIPG National Headquarters
1333 West 120th Ave, Suite 211
Westminster, CO 80234
303-412-6205
Email: aipg@aipg.org

Letters, articles, announcements, ads, etc. must be received by the Editor by the end of the fourth full week of the month preceding publication. Letters, articles, ads, announcements, etc. accepted on a space available basis. Submission of articles, etc. via e-mail is the preferred method. Copy can be accepted in most PC formats, but DOC or DOCX are preferred. Call or e-mail Stephanie Ashley for details on submission of copy or advertising at 303-215-0942 or stephanie.e.ashley@gmail.com.

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The opinions expressed are those of the authors and not the Colorado Section officers unless clearly stated otherwise.
President’s Message

Hello everyone!

I hope this newsletter finds you well. We have made it through the first quarter of 2022 already, and are racing towards the midpoint of the year. Our Section has a lot of great things going on, and I'd like to take a little time to review them below

• Star Chapter website: the Executive Committee has wisely chosen to follow on the footsteps of a few other Sections to centralize our website, email, and payment services under Star Chapter. This service is an investment in our future as a successful Section, as it automates and streamlines these services into a single platform. In addition to these helpful features, Star Chapter will help us transition officer roles year-on-year and take some pressure off our volunteer run organization.

• Annual Dinner: after a hiatus due to COVID-19, the annual dinner is BACK! As of this writing, it has not yet occurred, but we on the ExCom (especially Jessica Davey!) have been working very hard to make this evening a success! Student mentoring is a vital part of this event; after all, the students today are the professionals of tomorrow! Thanks in advance to all for those who are supporting and attending this special event, and a big THANK YOU to Jessica for making this happen again.

• Informative emails: Doug Peters spends a lot of time combing all the email blasts that other relevant organizations send out to bring us the very best of their content. Keep your eyes peeled (and email address current) to stay on top of these useful emails.

• New Student Chapter: Congratulations are in order to the geology students at Colorado College in my hometown of Colorado Springs for successful forming their new Student Chapter. I have found a key to successfully converting geology undergrads into Section members and possibly Section leaders to be early and positive involvement in an active student chapter. We are thrilled to have more students officially participating in the Section, and I look forward to visiting one of their meetings soon!

While I won't have the pleasure of joining you all at the Annual Dinner this year, I do look forward to another great year here in the Section. I am optimistic that we can have more in-person events in the future, including possibly some field trips this summer and fall.

I wish you all a great second quarter, and hope to see you soon.

Cheers,

Andrew T. Jones, GIT
Colorado Section President, 2022
Editor’s Remarks
Stephanie Ashley

There are so many new and exciting changes to announce this month! First, we have a new website! Second, to go with our new website, we have a new logo. Lastly, to go with our new website and new logo, we are announcing new advertising and sponsorship opportunities for the website and this very newsletter! You will find all the details on the following pages. I hope you enjoy these new changes. As always, please reach out if you have an article or idea for the newsletter. We are especially looking for articles from our student chapters. If you are a student or know a student who would like a platform to share their research, please reach out!

New Logo

A big thank you to Jessica Davey for our new logo. This logo reflects not only the values of AIPG, but the heritage of our Colorado chapter. Mining was the most significant industry in Colorado in the nineteenth and early twentieth centuries. It directly led to Colorado becoming a state in 1876. But mining wasn’t just a benefit to Colorado. New technology developed for mining here in our home state contributed to industrial and technological advances worldwide. And the products of mining in our state directly contributed to national and international development. You can learn more about the history of mining and related technological advances in Colorado at www.historycolorado.org/mining-industry-colorado.

Did you know the red of the “C” on the Colorado flag represents the ruddy earth that has played such an important role in Colorado’s history? The blue stripes on the flag represent the blue skies and the gold circle our abundant sunshine. The white stripe represents the snow-capped mountains. (https://en.wikipedia.org/wiki/Flag_of_Colorado)

Did you know: Colorado is the only state that incorporates its entire flag onto its state highway route markers?
Star Chapter—Our New Website
Jessica Davey

Happy spring to everyone!

The Colorado Section is extremely excited to announce the unveiling of our new website: https://aipg-cosection.org/

Our new website will allow us to streamline our operations with many features: events registration, newsletter and email notifications, scholarship information, and a single place for us to all find Colorado Section-related information. In the coming days, you will receive an email from the new website to create an account; this account login information will be separate from the login information you use for the National AIPG website. However, it will allow you to register for events, sign up for newsletter and website advertisements, and much more!

In addition to the new website, you will see emails coming from generic email addresses rather than the Colorado Section volunteer emails. We hope this will reduce confusion with all the emails we get on a daily basis and make it easier to discern important messages from spam. If you have any questions regarding the new website or the account registration process, please contact the Colorado Section at colorado-aipg@outlook.com.

AIPG-Colorado Section 2022 Advertising and Sponsorship
Jessica Davey

For a nominal fee, your business can advertise in our newsletter, website, or sponsor one of our meetings. AIPG is a non-profit organization; thus, the advertising and meeting sponsorship fees collected are solely used to operate the Colorado Section and to provide funding for field trips and meetings at the benefit to our members. All newsletter ads will be accompanied by an article guaranteeing your ad will be viewed! You can find an application with instructions at the end of this newsletter.
Reflections on the Marshall Fire and on Possible Future Occurrences in Colorado

David M. Abbott, Jr., CPG-4570

The Marshall Fire, which started December 30, 2021, was essentially an urban fire although grass fires adjacent to Marshall on the west side of Davidson Mesa and the adjacent, vacant south CU campus land and east of Marshall in the widely spaced homes and open space south of Marshall Road west of Superior were the original areas burned. A combination an extremely dry fall, 100+ mph winds, and relative humidities in the low 20s contributed to the rapid spread of the fire east into and through Superior and Lewisville. The fire burned about 6,025 acres and over 1,000 homes and businesses.

Fire origin: The origin of the Marshall Fire has not been determined and is an apparently complex issue. It took about 11 minutes after arriving at the small hamlet of Marshall for fire fighters and a sheriff’s deputy to find the active fire (https://wildfiredaily.com/tag/marshall-fire/). Marshall has been the site of an active coal mine fire for decades and was one of the stops on a GSA field trip I led with Dave Noe1. I don’t know whether the burning coal contributed to the Marshall Fire or not, but it is a factor to consider2.

Figure 1. Map of the Marshall Fire. The fire started in the vicinity of the sharp kink in the west end of Marshall Road

The Colorado Professional Geologist

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Spring 2022
Reflections on the Marshall Fire and on Possible Future Occurrences in Colorado (cont’d)

Can it happen again? The short answer is “yes.” The 2012 Waldo Canyon Fire burned urban homes on the west side of Colorado Springs in addition to adjacent National Forest to the west. The 2013 Black Forest Fire along the Palmer Divide north of Colorado Springs are earlier examples. The December 27, 2021 Ken Caryl or Oak Fire along C-470 and the adjacent Hogback to the west was a grass fire that threatened an apartment complex. A number of fires in recent years starting near or east of US-85 have threatened western parts of Highlands Ranch. Perhaps the difference between these fires and the Marshall Fire is wind velocity. The much smaller Middle Fork Fire north of Boulder, also on December 30th, may reflect the wind speed difference. Subsequent study of the Middle Fork Fire demonstrated that had that fire not been quickly contained, it could have burned into northern Longmont. Rocky Flats, Marshall, and south Boulder (with NCAR) are downstream of South Boulder Creek, which is below Devils Thumb on the Continental Divide and is the low spot in the Divide at the east end of the Colorado River drainage. Wind flows through the low points, like Devils Thumb and the windy character of Rocky Flats, Marshall and South Boulder is no surprise. Perhaps southwestern Broomfield County, western Westminster, and western Arvada will be future sites of urban wildfires. The January 2006 Plainview Fire burned the grassland north of CO-72, the Coal Creek Canyon Road, and west of CO-93 from Golden to Boulder. Had that fire jumped the highways, it potentially could reach western Arvada. The increase in extreme weather events as the atmosphere warms increases the probability of such events.

David M. Abbott, Jr., CPG-4570
Consulting Mining Geologist & Geoscience Ethics Columnist
5055 Tamarac Street
Denver, Colorado 80238
dmageol@msn.com


2 The original version of this reflection was written on January 7, 2022, prior to the time that burning coal seams were publicly recognized as a possible origin of the Marshall Fire. As of this February 8th revision, the cause of the fire is still undetermined, but the burning coal remains under serious consideration.
AIPG-Colorado Section
2022 Advertising and Sponsorship Application

For a nominal fee, your business can advertise in our newsletter, website, or sponsor one of our meetings. AIPG is a non-profit organization; thus, the advertising and meeting sponsorship fees collected are solely used to operate the Colorado Section and to provide funding for field trips and meetings at the benefit to our members. All newsletter ads will be accompanied by an article guaranteeing your ad will be viewed! Simply complete the following information below, including your level of advertisement/sponsorship and return it along with your check to the AIPG-Colorado Section (see address below).

2022 Price Structure:

<table>
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<th>Advertisement/Sponsorship Type&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Single Ad&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Annual&lt;sup&gt;3&lt;/sup&gt;</th>
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<tr>
<td>Newsletter and Website-1/4 Page Size</td>
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<td>$150</td>
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<tr>
<td>Newsletter and Website-1/2 Page Size</td>
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<td>$200</td>
</tr>
<tr>
<td>Newsletter and Website-Full Page</td>
<td>$125</td>
<td>$300</td>
</tr>
</tbody>
</table>

Notes:

1 Website ad will consist of company logo only.
2 Single Ad is for a single newsletter advertisement.
3 Annual Sponsorship is for the entire year – all four quarterly Colorado Section Newsletters.

Please complete the following company information:

Contact Name:________________________________________________________

Email Address:_______________________________________________________

Business Name:_____________________________________________________

Business Address:___________________________________________________

   City:________________________________ State:_________________ ZIP:_____

Phone Number:_______________________________________________________

Company Website Address:___________________________________________

2022 AIPG Colorado Section Advertising Rates
### Advertisement Selection (check all that apply):

<table>
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<tr>
<th>Advertisement/Sponsorship Type</th>
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<th>Annual²</th>
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<td>Newsletter and Website-1/4 Page Size</td>
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<tr>
<td>Newsletter and Website-1/2 Page Size</td>
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<tr>
<td>Newsletter and Website-Full Page</td>
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</tbody>
</table>

### Agreement:

By signing this release, I authorize AIPG to include my company logo and contact information on the AIPG Colorado Section website, newsletter, or meeting programs. I further affirm that the name and personal information provided on this form are true and correct. I further declare and understand that AIPG is not responsible for unsolicited contacts generated from this advertisement.

_________________________  ___________________________  _____________
Print Name                  Signature                    Date

Please send completed form and print-ready advertisement and company logo to colorado-aipg@outlook.com.

At this time, the Colorado Section can only accept check payments, please mail check to:

Deb Gomez – Treasurer  
AIPG-Colorado Section  
27343 Parsons Road  
Conifer, CO 80433

**All advertisements and logos must be received by the Colorado Section in “print-ready” status, optimized for colors and selected ad size in a .jpg or .pdf format**
AIPG Purposes

The purposes of the Institute shall include:

- advance the geological sciences and the profession of geology;
- establish qualifications for professional geologists;
- certify the qualifications of specific individual Member geologists to the public;
- promote high standards of ethical conduct among its Members and Adjuncts, and within the profession of geology; and represent, and advocate for, the geological profession before government and the general public.

What AIPG does . . .

- Professional Certification - Certifies geologists based on their Competence, Integrity, and Ethics.
- Categories of Membership - Certified Professional Geologist, Professional, Young Professional, Associate, and Student.
- Ombudsman - Intervenes with regulatory boards and agencies on behalf of individual geologists, at the geologist's request. Information also is disseminated in cooperation with the Association of State Boards of Geologists.

Geo Events and Other Useful Links

AAPG Academy Webinar
5 April 2022; 12:00–1:30 PM (CDT)
Tom Bowman, TDB Oil Corporation, and Steve Zody, Zody Geoscience
Join us for the first AAPG Academy session of 2022, “Revisiting Conventional Oil and Gas Reservoirs: A New World of Opportunities.” This session is free and open to all.
To register or get more info, go to https://aapg.zoom.us/meeting/register/tJAtce-qqDgvE9I0d2WGeG1saMmCzBJdWl25

RMAG April Luncheon
April 6, 2022; 12:00-1:00 pm MT; In-Person and Online
Maggiano's Little Italy, 500 16th St. Mall, #150, Denver, CO 80202
Speaker: Alexa Socianu, PDC Energy
To register or get more info, go to https://www.rmag.org/index.php?src=events&srctype=detail&refno=205&category=RMAG%20Luncheons
Geo Events and Other Useful Links (Continued)

AAPG Petroleum Systems Webinar Series
Wednesday, 6 April 2022; 8:00 AM (CDT)
Capillary Seals, Petroleum Migration Patterns and Charge Risk – Summary of Theory and Observations
To register or get more info, go to https://www.aapg.org/virtual-event/details/articleid/62722?utm_source=informz&utm_medium=email&utm_campaign=Change%20campaign%20name%20at%20mailing%20level&_zs=I66Eb1&_zl=LVfF8

AAPG Distinguished Lecture
6 April 2022; 10:30 a.m. (CDT)/11:30 a.m. (EDT)
Laura J. Pyrak-Nolte of the College of Science at Purdue University
Illuminating Fractures: Geophysics and Machine Learning
To register, go to https://aapg.zoom.us/webinar/register/WN_pD8NCgBIS-WsrtnyM4oksg

CEMS April Luncheon Webinar
April 12, 2022, 11:45 am—1 pm; Virtual only
Cynthia Teel, Partner & Jessie Rosell, Counsel, Lathrop GPM LLP
The PFAS Roadmap and Beyond: PFAS Regulatory Update
To register or get more info, go to https://coems.org/events/cems-luncheon-presentation-the-pfas-roadmap-and-beyond-pfas-regulatory-update-april-12-2022/

Scout BSA Day at Dinosaur Ridge
June 4, 2022 9:00 am—3:00 p.m.
This is a big day for BSA Scouts to learn about geology and earn merit badges. AIPG will be seeking volunteers soon so save the date and watch for more information.
https://dinoridge.org/programs-and-events/dinosaur-discovery-days/