



# The Colorado Professional Geologist



American Institute of Professional Geologists—Colorado Section  
*Colorado Section email: Colorado-aipg@outlook.com*



(Boy Scout Day 2019)

**Boy and Girl Scout Days at Dinosaur Ridge Canceled for 2020  
Due to COVID-19**

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## Call for Articles

*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:*

*summitdatasvcs@msn.com  
(Microsoft Word format is preferred.)*

*James Russell  
1909 Sage Circle, Golden, CO 80401*

Contact James at 303-278-4456  
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 120<sup>th</sup> Ave, Suite 211  
Westminster, CO 80234  
303-412-6205  
Email: aipg@aipg.org

(The National Office maintains the address list for all.)

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 James Russell for details on submission of copy or advertising at 303-815-3901, summitdatasvcs@msn.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

I hope everyone is having a good summer (as good as can be that is...) and getting out to enjoy the beauty of Colorado's geology! Obviously, however, COVID-19 continues to impact our daily lives.

Governor Jared Polis signed [Executive Order D 2020 138](#), which is a mandatory statewide mask order that went into effect on July 16, 2020 for 30 days. People in Colorado who are 11 years and older are required to wear a covering over their noses and mouths when entering or moving within any public indoor space. Widespread mask use is considered a low cost and highly effective way to reduce the spread of COVID-19 infections by as much as 65%. Broad adoption of mask wearing in Colorado may have significant economic benefits by allowing the State to prevent re-closures of businesses and schools and, ultimately, return to our normal lives more quickly.

As the State reopens for business, some counties are still under "Stay at Home" and "Safer at Home" orders whereas other counties have qualified for the next phase of reopening, "Protect Our Neighbors". Protect Our Neighbors means that communities that meet certain health-care criteria have less stringent restrictions regarding social distancing and other mitigation measures. Strong local public-health and health-care systems are the key to reopening our economy.

With all the welcomed re-openings of businesses throughout the State, I wish I could announce that AIPG-Colorado Section activities are resuming, but I can't...yet.

The Colorado Legislature has been active, however, as the Second Regular Session of the **72<sup>nd</sup> General Assembly** adjourned on June 15, **2020**. The First Regular Session of the 73<sup>rd</sup> will convene on January 13, 2021. A legislative summary for the 2020 Session is presented below. As always, I encourage you to get/stay involved. Also below are many worthy weblinks regarding: Home School and Online Courses; Water News; Mining News; Petroleum News; and Environmental Remediation News along with other topics pertinent to Geoscientists.

Continued good luck to all as we get through this pandemic together!

## **Editor's Remarks**

### **James Russell**

This has been an unusual summer. COVID-19 is still active, social distancing is practiced by many, and most meetings are virtual. But the Colorado economy is slowly coming back to life. We read or hear of promising new vaccines by years end. Let's hope we are over the worst of it. Professional conferences and training classes are now virtual and while virtual sessions an acceptable form of knowledge transfer, extroverts miss the personal interactions at these events. I do miss grilling other professionals who man booths at conferences and shaking hands with old friends who I haven't seen in a while.

Many thanks to Ron Pritchett. This issue includes many resources that the membership can access covering areas such as water, mining, environmental remediation, professional geology, petroleum, and nuclear energy. There is plenty here to keep engaged with industry and our profession.



## **Call for Articles**

If you have any articles that you would like to share, please let your editor know. *Sorry no rewards!*



## 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

### For Sheltering: Homeschool and Online Courses

[Khan Academy](#)

[Robinson Home School Curriculum](#)

[Study.com](#)

[Regis University Online](#)

[University of Northern Colorado Online](#)

[Metro State Online](#)

[Coursera University Boulder](#)

[Colorado School of Mines online](#)

[MIT Open Learning Library](#)

[Arizona State U. Virtual Field Trips](#)

### Water News

[FERC approves Gross Reservoir Expansion](#)

[Denver Water Quality Report 2020](#)

[Water and Increasing Costs](#)

[Trade Wilderness for Water: Aurora](#)

[Permian Water Creates Problems and Solutions](#)

[Colorado Water Congress 2020 Convention](#)

[Roster of Water User Organizations](#)

[Water Project Funding Opportunities](#)

[Citizen's Guide to Colorado Water Law](#)

## Geo Events and Other Useful Links (Continued)

### Mining News

[Colorado has a New Rare Earth Processing Plant](#)

[Clean Coal Technologies](#)

[Baseload Retirement Problems](#)

[Wyoming and Coal Retirement Plans](#)

[Battery Testing and Renewables](#)

[The Future is Mining](#)

[Critical Minerals List USGS](#)

[Map: Uranium Tailings Sites in Colorado](#)

[World Metals and Minerals in One Visual](#)

[Where Mining is Thriving](#)

Future [Global Mineral Resources](#)

SME [Technical Briefing Papers](#)

Mining [Timeline](#) in Colorado

[Industrial Minerals](#) in Colorado-USGS

### Environmental Remediation News

[Removing Toxic Chemicals from Water](#)

[New TENORM Rulemakings Comment Period](#)

[Low Dose Radiation](#)

[Enviroclass Webinars](#)

[Envirosummit Sept.1-3, Charlotte NC](#)

[Environmental Restoration Jobs](#)

Sites – [Covenants and Use Restrictions](#)

Environmental [Career Jobs](#) by State

Remediation [Government Bids & RFPs](#)

Brownfields-Remediation-CERCLA [JOBS](#)

### Professional Geology

[Tennessee Pass Train?](#)

[Net Zero Carbon by 2050 Proposal](#)

[National Legislative Trends](#)

Spencer: [Midwest Warming - Model vs. Reality](#)

[Colorado Geographic Naming Board](#)

[Harvard Business Analytics Program](#)

[The Case for Hiring Older Workers](#)

[Good Read: How Innovation Works - Matt Ridley](#)

[Critical Minerals and Clean Energy](#)

[Central Colorado Geology Road Log](#) (See Page 12)

[Building ArcGIS Story Maps](#)

[Tell your Story with StoryMaps](#)

## Geo Events and Other Useful Links (Continued)

[Starting Salaries: Colorado Masters Programs](#)  
[Virtual Reality and Outcrops](#)

### [Petroleum News](#)

**COGCC Rulemaking: Public Comments accepted to 8/14/2020 & 9/18/20**  
Submit your written comments to [DNR\\_COGCC.Rulemaking@state.co.us](mailto:DNR_COGCC.Rulemaking@state.co.us) Comments on the **200-600 Series Rules** are due 8/14/20 at 5pm. Comments on the **800/900/1200 Series Rules** are due 9/18/20 at 5pm. The Subject line must include which rulemaking the comment is concerning.

The proposed rules can be [VIEWED HERE](#)  
[Dan Haley: Why Colorado O&G Production Makes Sense](#)  
[COGCC Proposes higher mill levy on producers](#)

[Hickenlooper vs. Gardner](#)

[DOE - Export Approval to Jordan Cove](#)

[Occidental to sell 190,000 acres of mineral rights-railroad strip](#)

[AAPG Toolkit for Continuing Education](#)

[The Way Ahead: Effective Remote Work](#)

[Python Basics for the Oilfield](#)

[Virtual Energy Summit August 17-19](#)

[Networking with COGA's ENGEN Program](#)

### [Nuclear Energy for the 21st Century](#)

[AIPG Colorado Position Statement on Nuclear Energy and Survey Results](#)

[Nuclear Energy is Climate Justice](#)

[Low-Dose Ionizing Radiation](#)

[Interactive Map of America's Nuclear Projects](#)

[Is Hydrogen the New Wonder Fuel?](#)

[Advantages and Challenges of Nuclear Energy](#)

[National Security Requires a Stronger Nuclear Energy Industry](#)

[Energy Secretary: Restore American Nuclear Leadership](#)

[Building a Uranium Reserve](#)

[Uranium Sources for Nuclear Power](#)

[Industrial Applications of Nuclear Energy](#)

[Three Reactor Types to Watch - 2030](#)

[Testing on Molten Salt Reactors](#)

**NEW COLORADO LAWS on NATURAL RESOURCES**  
**Legislative/Regulatory Report**  
**Colorado Section: American Institute of Professional Geologists**  
**August 2020**  
Chair: Ron Pritchett

See a [Spreadsheet Summary](#) of Proposed New Laws as of: **7/17/2020**, color-coded as to natural resources and commerce related to water, oil & gas, mining, environmental remediation, professional practice, and modular nuclear energy, plus a [Website Link](#) for Bills.

In the past month, the Governor signed the following Bills to law:

- \*Regulation of Perfluoroalkyl and Polyfluoroalkyl substances-HB20-1119**
- \*Environmental Justice - increased fines-HB20-1143**
- \*Sunset Coal Mine Board of Examiners - Continued-HB20-1208**
- \*Sunset Water Wastewater Facility Operators Certification Board - Continued-HB20-1215**
- \*Increase Public Protection Air Toxics Emissions-HB20-1265**
- \*Hazardous Materials Transportation Permit Issuance-SB20-118**
- \*Keep Presumption Noninjury Water Rights on Divided Land-SB20-155**
- \*Increase Fees to Protect Air Quality-SB20-204**

For details, please: visit this Bill Summary [Website link](#), type-in a Bill number, click on the Bill Title, and read the [Fiscal Notes](#) associated with these Bills to see costs and details. Of 53 Bills that affect geologic professions identified at the start of the year, 17 were signed to law, 29 were killed, and 7 were laid-over to year-end.

**Ballot initiatives**

See this [Ballotpedia](#) link to see initiatives that are on the ballot November 3rd. See also potential measures dependent on signature gathering, measures with Titles set, and a summary of contributions to measures. For example, see signature-gathering for: **#174**, forces a 2,500 ft. setback for O&G operations from occupied buildings (takes mineral rights); **#284**, allows natural gas for domestic use (counters bans on use of hydrocarbon fuel); **#295**, requires voter approval for government enterprises that are exempt from the TABOR amendment; and **#306**, which lowers the Colorado income tax rate (countering fees not called taxes.)

**Recommendation: - Citizen Action**

AIPG professionals will have opportunities to serve on Boards, such as:

- 1) Air Quality Enterprise Board ([SB20-204](#))
- 2) Geographic Naming Board ([Executive Order B 2020-004](#))

Geologists can be concerned with plans to change Colorado's historic names, which could erase names and places important in geologic reference literature.



## Legislative/Regulatory Report (Continued)

Thanks to all who have contacted Senators and Representatives to lobby for or against Bills that are constructive or destructive toward prosperity potential derived from geologic professions. Please take a look at the Ballot Initiatives and act to protect your rights and responsibilities. Prepare for voting November 3rd, and vote like a professional geologist.\* \* \*

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See:

[Citizens' Guide to Lawmaking & Lobbying](#)

Live and Archived video

[Colorado Law Debate and Vote Process:](#)

**AIPG Members please** consider Colorado State committee and board positions.

**See all Boards and Commissions populated by a Governor nomination** and State Senate confirmation may be required; include your personal note with reference to the Board Position. **Thank you for your Professional Geology!** If you do not apply and serve, the Governor will appoint someone who may not have qualifications appropriate for wise use of natural resources.

Meanwhile - lend your expert opinion on legislation: please [contact your Legislators](#)

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**TENORM (*Technically Enhanced Naturally Occurring Radioactive Materials*)**  
(stems from Law SB18-245)

...link to [Colorado Dept. of Public Health & Environment](#).

...[link to reference documents:](#)

..[link to Colorado TENORM Stakeholder Input Files:](#)  
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Add improved **presentation and leadership skills** in a Toastmasters program;  
for example, visit [Cherry Creek Toastmasters](#) any Thursday from 7:00-8:30am.

### Allied Professional Societies

**Colorado Allied Professional Societies** - look in "Events" on these websites for: **meetings, lunch speakers & topics, trend articles, courses and on-line courses, field trips, publications, opportunities to speak, and opportunities to publish.** Expand your interdisciplinary skills!

The Rocky Mountain Association of Geologists ([RMAG](#))

Society of Petroleum Engineers Denver Section ([DenverSPE](#))

Society of Independent Professional Earth Scientists-Denver ([SIPES](#))

Colorado Scientific Society ([CSS](#))

Denver Area Petroleum Landmen ([DAPL](#))

Denver Geophysical Society ([DGS](#))

### Legislative/Regulatory Report (Continued)

Denver Well Log Society ([SPWLA](#))  
Denver Region Exploration Geologists ([DREGS](#))  
Association of Women Geoscientists-Laramide Chapter ([AWG Laramide](#))  
Society for Sedimentary Geology-Denver ([RMS-SEPM](#))  
Society of Economic Geologists ([SEG](#))  
Colorado Environmental Management Society ([CEMS](#))  
Petroleum Technology Transfer Council ([PTTC](#))  
Rocky Mountain Mineral Law Foundation ([RM-MLF](#))  
Colorado Mining Association ([CMA](#))  
Minerals Education Coalition ([MEC](#))  
Mining and Metallurgical Society of America ([MMSA](#))  
Society for Mining Metallurgy and Exploration ([SME](#))  
National Mining Hall of Fame ([NMHF](#))  
Western Museum of Mining and Industry ([WMMI](#))  
Denver Mining Club Ltd ([RAM](#))  
Rocky Mountain Coal Mining Institute ([RMCMCI](#))  
Colorado Foundation for Water Education ([FWE](#))  
Water Information Program ([WIP](#))  
Love Colorado Water ([LCW](#))  
LTE Environmental Newsletter ([LTENV](#))  
International Erosion Control Association ([IECA](#))  
Nuclear Science and Engineering CSM ([NuclearMines](#))

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#### **Important References!**

[Colorado Professional Geologist](#) digital files all the way back to 1993 are posted to the CO AIPG dropbox site: **Thank you David Abbott** for creating and preserving this valuable record of AIPG Colorado ideas.

AND

[Field Trip Files](#) from 1974

#### **Reference Articles on "Policy Science"**

Foundation of policies that help or harm.

**Stay on top of Resource News - visit these sites:**

[Complete Colorado](#)

and

[Denver Business Journal](#)

See the Energy Section for Trends in Colorado

and

[Western Wire](#)

## Legislative/Regulatory Report (Continued)

### The Visual Capitalist

Graphic trends and conditions, including topics of Energy, Mining, and "Green" topics.

### Mining made visual Lobbying groups which may have interests aligned with Colorado AIPG:

- \*[COGA](#) (Colorado Oil and Gas Association): Public Affairs - Scott Prestridge
- \*[CAMRO](#) (Colorado Alliance of Mineral Royalty Owners): President Neil Ray
- \*[CPA](#) (Colorado Petroleum Association): Exec. Director Angie Binder
- \*[CMA](#) (Colorado Mining Association): President Stan Dempsey
- \*[Colorado Water Congress](#): President: Erin Wilson
- \*[Energy Strong](#): President: Dustin Case
- \*[WEA](#) (Western Energy Alliance) - Kathleen Sgamma
- \*[WOGA](#) (Women in Oil and Gas Association) - Egle Metsaev, President

As Bills move through the legislature in 2019, AIPG Colorado may join the groups above in taking positions.

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### Colorado Environmental Management Society Newsletter

### The Professional Geologist Newsletter

### AIPG Colorado LinkedIn

### AIPG Colorado Facebook Link:

[The Regulation Razor - \(scroll down on web page\) Compliance/Eng./Remediation and Jobs](#)

### Metro State University & Applied Geology

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### EnergyJobLine Rig Zone Jobs

### Lobbying groups which may have interests aligned with Colorado AIPG:

- \*[COGA](#) (Colorado Oil and Gas Association): Public Affairs - Scott Prestridge
- \*[CAMRO](#) (Colorado Alliance of Mineral Royalty Owners): President Neil Ray
- \*[CPA](#) (Colorado Petroleum Association): Exec. Director Angie Binder
- \*[CMA](#) (Colorado Mining Association): President Stan Dempsey
- \*[Colorado Water Congress](#): President: Erin Wilson
- \*[Energy Strong](#): President: Dustin Case
- \*[WEA](#) (Western Energy Alliance) - Kathleen Sgamma
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### Colorado Environmental Management Society Newsletter

### The Professional Geologist Newsletter

## Legislative/Regulatory Report (Continued)

### Colorado Geological Road Log Update

Sometime in the next two months your editor will be rolling out a new and improved Central Colorado Geological Road Log. ESRI has updated their ArcGIS Story Map software which requires your editor to do an overhaul of the materials in the current version. It also requires a lot of cutting and pasting from the old to the new version. I am currently busy updating and bug proofing this new version. I will let everyone know when the next version is available. As always, this application is free for all to use. All that is needed is an Internet connection accessed by cell phone, tablet, or laptop.

The current version can be found here: <https://www.arcgis.com/apps/Cascade/index.html?appid=e2547951e5cc4406a44d417d85606762>





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oil and gas development? Contact us to request  
an informational presentation:

[ambassador@anadarko.com](mailto:ambassador@anadarko.com)



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