



## Wisconsin

### President's Message

We are slowly moving toward post-COVID times. Things have changed, and I am sure all of us have talked about getting back to normal. On one hand, I look forward to a personal and professional life without the worry of potentially infecting or being infected. On the other hand, I hope we all realize that this time has given us the opportunity to decide what changes are worth keeping and what should go away as we construct the new normal.

Most of us experienced working from home to some degree and have come to find it a desirable benefit. The downside has been finding that working from home means work is always there, and it can be difficult to find time to step away and recharge. Interacting through Zoom is convenient, but I miss the easy back and forth interaction of in-person communication.

I am reminded of a cousin who recently graduated from college and landed a great job with a tech company. He moved to St. Louis this past fall, just in time for the office to shut down due to the pandemic. He was left working from his apartment, knowing no one and having never met his supervisor in person! Given the circumstances, he was eventually allowed to move back to where he went to college and work from there. His experience has me wondering how we are now, and how should we in the future; facilitate training and mentoring for new staff.

When I began my career, everyone was working toward a job with an oil company – good money, and relatively stable once you got in. Geology was about finding and extracting resources, but [the landscape has changed](#).

**Continued on Page 2**

### 2021 Wisconsin Section Officers

#### President

Paula Leier-Engelhardt, P.G.,  
C.P.G.

[paula@hydrogeosolutionswi.com](mailto:paula@hydrogeosolutionswi.com)

#### Vice President

Thomas Kettinger, P.G., C.P.G.

[Thomas.Kettinger@claros.com](mailto:Thomas.Kettinger@claros.com)

#### Treasurer

Andrew Graham, P.G., C.P.G.,  
P.E

[andrewgrahampe@gmail.com](mailto:andrewgrahampe@gmail.com)

#### Secretary

Trevor Nobile, P.G., C.P.G.

[wade81@aol.com](mailto:wade81@aol.com)

#### Regulations & Legislation Committee

Heather Hallett, P.G., C.P.G.

[Heather.Hallett@foth.com](mailto:Heather.Hallett@foth.com)

#### Screening Board Chairman

Andrew Mott, P.G., C.P.G.

[andrew.mott@aecom.com](mailto:andrew.mott@aecom.com)

#### Education Committee Chair

Rebecca Butcher, ECP

[rebecca.butcher@woodplc.com](mailto:rebecca.butcher@woodplc.com)

#### Newsletter Editor

Christine Lilek, P.G., C.P.G.

[clilek5959@gmail.com](mailto:clilek5959@gmail.com)

**President’s Message continued. . .**

Certainly, we still need these resources, but [future geologists will use new tools to interpret earth science in different ways to help our society](#). Like the earth sciences, AIPG is at a crossroads. How can we respond to this pivot in the earth sciences?

AIPG-Wisconsin Section has completed or is working on a number of projects to promote geology and the general public’s understanding of earth sciences:

- Recognizing the need to support careers in STEM, especially in under-represented groups, Wisconsin AIPG is working in partnership with the Wisconsin Geologic and Natural History Survey and a program at UW-Milwaukee to identify and provide funding for a summer internship at the Survey.
- We are reaching out to schools in our local communities to best see how we can support earth science education.
- We are also working to develop a program to provide financial support to geology undergraduates wishing to take the ASBOG exam.
- In March, we sponsored the webinar *PFAS: Deciphering a Lab Report*. The audience included not only professionals but the general public in communities dealing with PFAS impacts to water supplies.

I said this a year ago, and still believe it; our world, and even ourselves, have been changed. Let’s work together to continue to do our jobs professionally and for the betterment of all. And take comfort in knowing that the rocks will still be there. . .

Regards,  
Paula Leier-Engelhardt

**Far from Boring, and another Time I Had to Get Away from Home – Part 1**

By Paula Leier-Engelhardt, P.G., C.P.G.

The COVID-19 pandemic reminds me of another time I longed to get away. . .

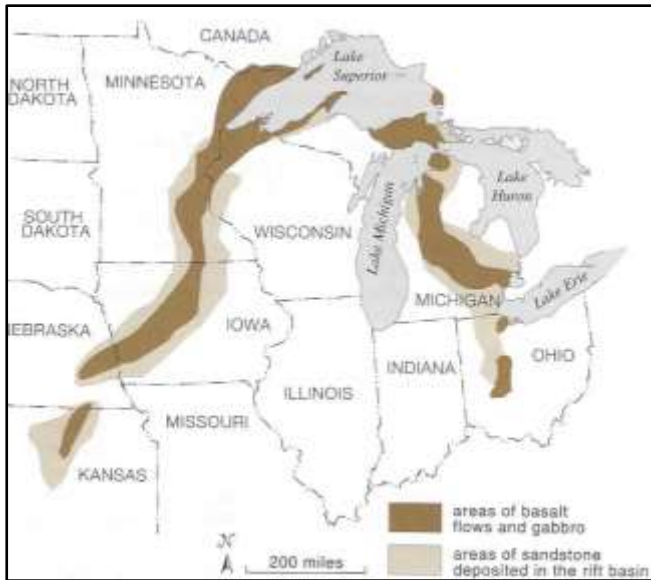
Our home is in a wooded wetland, lovingly referred to as The Swamp. There is a dug pond in front of the house, and we landscape with a lot of native plants and shrubs which other native residents enjoy (some more than I would like – hey deer, I am looking at you!). In 2013, we experienced a weather phenomenon known as a [wet microburst](#), slamming 6 inches of rain on us in 45 minutes and downing trees all over the driveway. It took 8 hours to cut our way the 300 feet out to the road. Over the next two years, we gradually got things cleaned up to the point you really would not have known it happened.

Then in 2015, we were hit by a thunderstorm with 70 mph straight-line winds, taking out 30+ trees. I wanted to cry; our woods looked so hurt. We surveyed the damage, called the insurance company and the arborist we work with, and then decided we had to *get out of Dodge*. Destination: four days cruising the North Shore of Minnesota. Midcontinent Rift, here we come! We packed a lot into our four-day visit of this area, so in Part I ride along from Duluth to Tofte.

North Shore of Minnesota

The Midcontinent Rift System is 2500 km long, extending from Kansas to Lake Superior, then curving south through Michigan and Ohio. It developed within the Proterozoic continent of Laurentia approximately 1.1 billion years ago. The immense volume of magma produced, as well as its composition, implies it was because of a mantle plume impacting the lithosphere in the area of modern Lake Superior, geologically analogous to rocks making up Iceland.

The amount of lava within the rift is immense,



Midcontinent Rift System. From *Roadside Geology of Minnesota*

estimated to be 480,000 cubic miles (!), and approximately 60,000 feet thick beneath Lake Superior. The biggest unknown is why the Midcontinent Rift was aborted after 22 million years of eruption without opening a new ocean basin.

intruded by the slightly younger Duluth Complex. It is a delightful collection of basalts, gabbro, rhyolites, and anorthosite, with a few granites and occasional siltstones/sandstones/conglomerates thrown in for good measure. I must apologize but have never been a big fan of mafic rocks (black, dense, fine-grained, and cannot be identified correctly unless you look at a sample in thin section) but the NSVG has enough variety to keep a person interested. If you go here, my advice is (at least on your first trip) keep thinking big. You can easily be wrapped up in geologic minutia at the expense of forgetting the overall structure you will be observing.

Driving north out of Duluth along Minnesota 61, officially known as the North Shore Scenic Drive, we found Lake Superior uncharacteristically calm, so much so one could hardly tell where the lake ended, and the sky began.



You do not often see Gitch-gumi this calm. The dot is a boat on the horizon. Photo: Steve Engelhardt



Bedrock geology of NE Minnesota and the North Shore of Lake Superior. From *Roadside Geology of Minnesota*

The North Shore Volcanic Group (NSVG) is one of several lava sequences exposed around the shores and islands of Lake Superior and is

About 30 miles down the road, we drove through the town of [Castle Danger](#), and instantly I wanted to say I was from there. Who would not want to say that was their hometown? (Great [brewery](#) there, too).



Coollest. Name. EVER. Photo: Steve Engelhardt

We ended up staying in Tofte, a little over halfway between Duluth and the Canadian border. We had not intended to go that far north, but we made a tactical error in choosing Labor Day weekend for this trip. We found out that that the Twin Cities empty out and people head to the North Shore ‘to get away’ on holiday weekends. If the truth were told, it was the only hotel room we could find for three nights that did not cost an arm and a leg. (Note to self, plan next time).

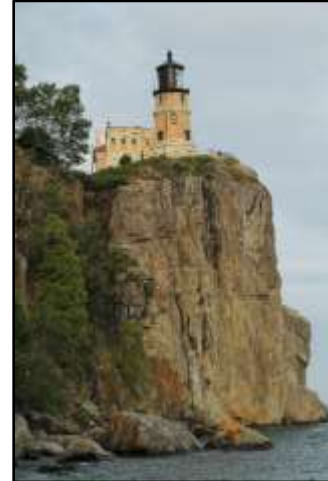
Most visitors to the North Shore tend to stay in the vicinity of three state parks -- Gooseberry Falls, Split Rock Lighthouse, and Tettegouche – all found within a 20-mile stretch of Minnesota 61. The scenery near these three parks is spectacular, but we found smaller Temperance River State Park less crowded and just as geologically interesting. Some highlights:

Gooseberry Falls – This Park is easily accessible from the highway. The Gooseberry River flows through the area, producing several waterfalls. From the visitor center, take the short path down to Middle Falls.



Middle Falls cascades over three different flows. At the base of the falls, one stands on the undulating top of a pahoehoe flow. The middle flow is relatively thin, and the thicker flow at the top cooled slowly enough for columnar joints to form. Photo: Steve Engelhardt

Split Rock Lighthouse – There is no way to take a bad picture in this park. The lighthouse is located on a 168-foot-high cliff composed of single block of anorthosite, brought to the surface by rising magma during rifting.



Split Rock Lighthouse. Built in 1905, all the materials for the lighthouse were hauled up the cliff. Photo: Steve Engelhardt

If you want to see more of this anorthosite, stop along the highway in the town of Silver Bay.



Silver Bay roadcut. The light gray anorthosite xenolith was carried by the diabase intrusion to the left. Granitic dikes cut across both. Photo: Steve Engelhardt

Tettegouche – Palisade Head and Shovel Point are both made of the Palisade Head Rhyolite, a flow over 300 feet thick. From Shovel Point, look north and you can begin to understand the structure of the Midcontinent Rift.



View NE from Shovel Point. Little Palisade (also rhyolite) in the foreground, lava flows of the NSVG dip about 20 degrees toward the lake center. Photo: Steve Engelhardt

By far our favorite state park was Temperance River. Smaller and quieter than the parks to the south, you can see an impressive overprint of glacial geology on the lavas of the NSVG. Lake Superior drops off steeply at the mouth of the Temperance River, creating a crazy steep stream gradient. The river flows through a remarkable gorge with the sides showing the outlines of giant potholes carved by swirling stones.



Temperance River gorge and potholes worn into the sides of the gorge. Photos: Steve Engelhardt

So much lava. So much energy. We needed a quiet place to take it all in and discovered the [Naniboujou Lodge](#). In the 1920s, it was a private lodge, but is now open to all. Do take note, they proudly advertise as being media free (no wi-fi, TV, phones, or radios). The restaurant is as spectacular as the geology.



Although a bit muddy and dirty, we were ushered to the solarium and graciously served afternoon tea. We were the only ones there and could feel the peace seep into our bones.

Next newsletter, Part II of the North Shore.

## Congratulations to Our Wisconsin Section 2021 Executive Board Members

### President

President Paula Leier-Engelhardt – P.G., C.P.G is Principal Geologist and owner of HydroGeo Solutions LLC, with 35 years of experience as a consulting geologist. Her experience includes soil and groundwater contamination assessment; siting and permitting municipal and industrial landfills; and statistical analyses and interpretation of agency-required groundwater monitoring data. Previous positions: STS, AECOM.

### Vice President

Vice President Thomas Kettinger – P. G., C.P.G. is Senior Manager of Global Remediation of Clarios (formerly Johnson Controls Power Solutions). His experience includes brownfield development, industrial site remediation, and enforcement. He has a lead role in implementing many transformation initiatives, including manage a global portfolio of current and former facilities and third-party legacy sites undergoing environmental site remediation. Thomas is a subject matter expert for Clarios working across the company to ensure activities follow all regulations and standards.

### Secretary

Secretary Trevor Nobile P.G., C.P.G is Field Operations Director at Wisconsin Department of Natural Resources (DNR). Previous positions - Geoscientist for Tetra Tech Inc. Technical expertise includes hydrogeologic, geomorphologic, and hydrologic assessment and investigation; soil, sediment, rock classification and field engineering.

### Treasurer

Treasurer Andrew Graham – P.G., C.P.G, and P.E is Project Manager at Realtime Utility Engineers, Inc. (A Quanta Services Company). Engineering project manager with over 20 years of experience

specializing in electrical utility T & D and design-build renewable energy projects. Previous positions: IEA, Vierbicher Associates.

### **Government Affairs Chair**

Government Affairs Chair Heather Hallett, P.G., C.P.G. is a Hydrogeologist at Foth Infrastructure & Environment in Green Bay. She leads the hydrology/geology discipline at Foth and provides support to a range of projects from landfill and mine project permitting/compliance to environmental remediation. She previously served as president of WGWA after moving to Appleton from Albany, NY where she worked for CDM Smith.

### **Member Screening Chair**

Member Screening Chair Andrew Mott P.G, C.P.G is Project Hydrogeologist with AECOM in the firm's Environmental Practice. Areas of specialization include the following: Site development, environmental site assessments, soil and groundwater investigation, compliance issues, and remediation. He specializes in Brownfield grant writing and Brownfield redevelopment. Previous positions with STS Consultants.

### **Education Committee Chair**

Education Committee Chair Rebecca Butcher Early Career Professional Geologist has a MSc in Geology with an emphasis in geophysics at the University of Maryland, College Park She is currently working at Wood, PLC in Madison, Wisconsin on sediment and environmental conceptual site modeling.

### **Newsletter Editor**

Newsletter Editor Christine Lilek, P.G., C.P.G. Christine is an Environmental Health Training Coordinator for the WI Department of Health Services and Commissioner for the Lake Sinissippi Improvement District.

Her previous positions include Senior Hydrogeologist for DNR, MSA Professional Services, Wisconsin Electric Power Company,

Board Director for Village of Cottage Grove Sewer and Water Utility.

## **2021 AIPG Section Leadership Awardee – Jack Travis**

The Wisconsin Section of AIPG nominated and National AIPG awarded Dr. Jack Travis- Geology Professor emeritus at University of Wisconsin - Whitewater the 2021 Section Leadership Award.



Former National President Ron Wallace and Dr. Jack Travis - retired Geology Professor from UW-Whitewater attending WIAIPG's Earth and Water Student Presentation Day in 2013 Photo Credit: Christine Lilek

Dr. Travis has a long record of distinguished and outstanding service to the profession of geology. He has provided: (a) education and training of geologists, (b) professional development of geologists, (c) service to the Institute, (d) leadership in the surveillance of laws, rules, and regulations affecting geology, geologists, and the public, and (e) activity in local and regional affairs of geologists.

### **Service to the Institute**

Dr. Travis was an active member of the Wisconsin Section of AIPG during our separation from the Minnesota-Wisconsin Section in the 1980's. Wisconsin was proceeding with developing professional licensing for geologists in the State and Dr. Travis encouraged geologists to

support this professional licensing effort by supporting a Wisconsin Section of AIPG.

Wisconsin promulgated the professional geologist license in 1995. Dr. Travis and the Wisconsin Section of AIPG helped these individuals apply for and obtain their PGs as well promoting CPG certification through AIPG.

In the year 2000, Dr. Travis was the chairman for the National AIPG Conference in Milwaukee. It took several years before 2000 to pull together this large and diverse conference under the direction of Dr. Travis. "Learning from the Past – Directions for the Future" AIPG Conference was held from October 10 – 14, 2000 at the Milwaukee Pfister Hotel.

The conference featured: 4 Short Courses: Ethics, Liability, and Litigation in Geology, Geographic Information Systems for Geologists, Unraveling Glacial Hydro stratigraphy, and ISO 14000 and Geology. It also provided 3 Geology Field Trips: Sand & Gravel Pits, Quarries and Suburban Growth, Slope Stability and Shoreline Protection, and a tour of Geology of Badger Army Ammunition Plant.

The guests to the conference were provided four Fun Guest Trips: Milwaukee in a Nutshell, Historic Cedarburg Visit, Arts and Artist Tour, and a Holy Hill Tour. Plus, the conference included a Brewery Tour and an Edelweiss Boat Trip for all the National Executive board members!

The Technical Sessions included: Geology Education and the Next Ten Years, Urban Growth and the Fate of the Extractive Industries, Environmental Corrective Action – What We Learned and What is Next for Slope Stability, New Techniques in Subsurface Investigations, and the Role of Geology in Property Transfers and Brownfield Development.

In the first decade of the 20th century, Dr. Travis created and led very helpful field trips for Wisconsin Section of AIPG Annual Meetings.



Dr. Travis leading WIAIPG Field Trip in Door County. Jayne Englebert P.G., C.P.G. holding field map. Photo Credit Craig Cafilish

He was also instrumental in working with the Wisconsin Department of Natural Resources and University Extension to be Wisconsin Section of AIPG's representative for developing the geology portion of the Wisconsin Master Naturalist (WMN) training program. Included in the training is an extensive Wisconsin Geology section developed Dr. Travis. Since 2013, the WMN program has reached 163,993 individuals with naturalist programming throughout the State. The program has representatives in 66 of 72 Wisconsin counties and has a total of 863 Master Naturalists and 100 trained instructors that teach the Master Naturalist course.

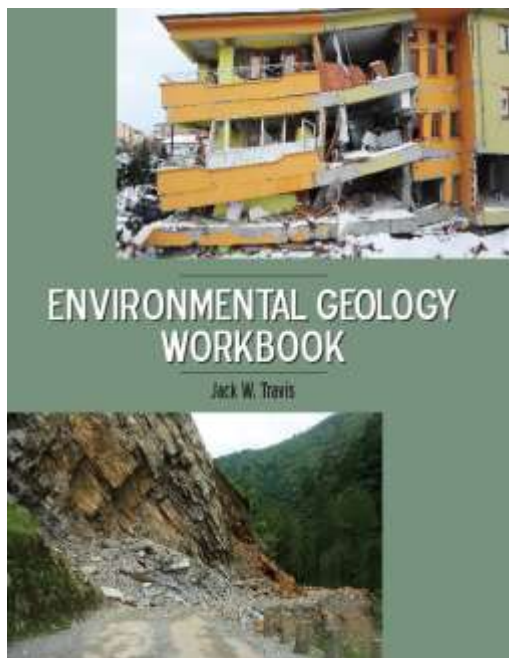
Dr. Travis continues service to the Wisconsin Section of AIPG to this day, suggesting activities and new articles for Wisconsin Section of AIPG newsletter and was very helpful planning the hosting of National Executive Board meeting here in Wisconsin in June 2019.

### **Education and Training of Geologists**

Dr. Travis taught many environmental geologists, engineering geologists, geological engineers, and geotechnical engineers during his tenure as a geology professor at University of Wisconsin -

Whitewater. He was able to provide these geoscientists with a wide range of tools to solve environmental problems and conflicts.

The students learned how to gather information such as soil type, rock structure, and groundwater flow and then utilize it to understand geological site conditions. Field surveys, maps, well logs, bore holes, ground-penetrating radar, aerial photos, geologic literature were used to reveal potential natural hazards in an area and develop plans for remediating contaminated sites.



His success as a Geology Professor did not end when he retired from University of Wisconsin - Whitewater but continued as he gathered these valuable lessons into an *Environmental Geology Field Workbook*, which was published in 2019 by Waveland Press, a distinguished college textbook publisher. The workbook contains materials gathered from geologists and environmental scientists Dr. Travis met and stayed in contact with his entire career.

### **Professional Development of Geologists**

During Dr. Travis's time as a Geology Professor at the University of Wisconsin – Whitewater, he took the time to attend and present papers at

conferences and seminars. An example of one such paper was entitled: Luther, F.R., (1992), The Waterloo Quartzite at the old Portland Quarry: in the 56th Annual Tri-State Geology Field conference Guidebook to the Geological setting of Whitewater, Wisconsin and surrounding Area, Jack Travis, ed. P51-61.

### **Leadership in Surveillance of Regulations Affecting Geologists and the Public**

Dr. Travis has worked hard the past decade explaining the problem of karst topography to Door County citizens, businesses and representatives. A lack of topsoil above the dolomite means that contaminants cannot be filtered out before they can reach the groundwater supply. Without adequate topsoil, water and anything else that is soluble quickly passes through the soil to the bedrock where it is quickly transported down through fractures.

Dr. Travis has explained that there is no practical remedy to this situation other than cognizance and careful monitoring and restriction of what goes onto the surface of the peninsula. He has recommended finding the right balance in implementing restrictions in this area. In the last couple years, information provided by Dr. Travis has helped Door County and the Wisconsin Department of Natural Resources fine tune the Wisconsin manure spreading regulations.

### **Active in Local and Regional Affairs**

In 2010, Dr. Travis, received the Friends of Wisconsin State Parks Hero Award in honor of his service as the President of the Newport Wilderness Society and environmental and geology programs given to the Society's members for many years.

Dr. Travis conducted numerous specialized training and lectures such as: Identifying Rocks and Fossils, Addressing climate change, Energy Status of the United States, Ancient Sand Beaches, and Contaminated Soil and Ground Water. His work with the Newport Wilderness Society also included geologic articles in their



newsletters and publishing pamphlets focusing on history, geology, or native plants and animals of the area. An example of one of the pamphlets is entitled: "Fossils of the Niagara Escarpment". He also has served on the Board of Directors for Friends of Wisconsin State Parks from 2015 to 2018.

The Section Leadership Award has always been given to individuals who have long records of distinguished and outstanding service to the profession. Dr. Travis fits those criteria indeed!

This award will be presented at the National Conference in October 2021.

Congratulations, Dr. Travis!

### **Wisconsin Section Addition to AIPG National's Legislation Resources**

WI – AIPG has added 3 examples of how to respond to treats of PG regulation and keep our legislators informed on the importance of professional licensing in Wisconsin.

The AIPG National website has a [web page for sections to provide legislation resources](#) for other sections to find help. Please see the current information listed below and [let us know](#) if we need to make any changes, updates, or if your section wants to be added to assist other sections that may be going through similar circumstances. [AIPG Sections Legislation Resources Web Page](#)

#### **Arizona**

Arizona has experience they can share regarding this issue.

Contact: [Barbara Murphy](#)

#### **Florida**

FAPG/AIPG Florida Section website legislation web page - <https://fapg.org/Legislation>.

Contact: [Troy Bernier](#)

#### **Michigan**

Michigan Section website legislation web page - <http://mi.aipg.org/legislation.htm>

Contact - [Kevin Lund](#)

#### **New Hampshire**

The link to the bill and the law: <http://www.state.nh.us/jtboard/geo.htm>

Contact - [Dorothy Richter](#)

#### **Texas**

I have several versions, most of which incorporate language negotiated with the engineers and other interested parties.

Contact - [Kevin Coleman](#).

#### **Utah**

In Utah, there are 2 laws and 2 sets of associated regs. The one law is an umbrella law that applies to all licensed professions addressing the items common to all, including penalties, disciplinary action, etc. The other law is specific to geologists. FYI, we are considering a rule change by this time next year (06/07) to address expert witness testimony, which is not specifically addressed. The link will get you

there: [http://www.dopl.utah.gov/licensing/geologist\\_sub\\_page.html#geostatutes](http://www.dopl.utah.gov/licensing/geologist_sub_page.html#geostatutes)

Contact - [Janet Roemmel](#)



Wisconsin

#### **[ADDRESSING DELICENSING](#)**

WI-AIPG Section has written to our legislators several times about the importance of professional licensing of geologists in Wisconsin. We also held

four Geology Day events at the Wisconsin State Capitol and rallied licensed geologists, college professors, and students to show support for licensing in a Department of Professionals Services survey. [Click here for more information.](#)  
Contact - [Christine Lilek](#)

## WI AIPG Hosts PFAS Webinar

On March 4, 2021 WI – AIPG hosted a PFAS Webinar titled “PFAS: Deciphering a Lab Report”. Over 50 individuals from municipalities, water utilities, regulatory agencies and consulting companies attended the event.

The attendees were looking for resources to understand the levels of PFAS (per- and polyfluorinated alkyl substances) that have contaminated their local soils and water supplies.



Taryn McKnight — PFAS Practice Leader from Eurofins presented and interpreted PFAS lab reports during the lunch hour webinar and:

- Defined acronyms
- Interpreted numerical values
- Reviewed sampling objectives and
- Explained lab quality assurance

WI – AIPG appreciated the donated webinar platform and coordination provide by Rebecca Butcher and her consulting company Wood.

Attendees appreciated the webinar and send positive feedback including this comment:

“This was a good webinar on a much-overlooked subject. The presenter was truly knowledgeable and presented the information in a manner that was easy to follow.”

“Easy to understand slides. Nice details of what the lab report will include.”

“Well done on this free webinar put on by AIPG Wisconsin!”

## Regulatory PFAS Updates

By Heather Hallet



Photo Credit: Heather Hallet

### PFAS:

The Wisconsin Department of Natural Resources announced in December the release of a statewide [PFAS Action Plan](#) created, developed by the PFAS Action Council, to address growing public health and environmental concerns regarding PFAS (per- and polyfluoroalkyl substances) in Wisconsin.

### The [Wisconsin PFAS Action Council \(WisPAC\)](#),

in partnership with other state agencies, hosts public meetings. WisPac has held public comment periods, listening sessions, and facilitated external advisory groups. The most recent WisPAC meeting can be viewed at: [Wisconsin PFAS Action Council Releases PFAS Action Plan \[VIDEO 00:38:47\]](#) The **PFAS External Advisory Group** is staffed by the DNR and members include stakeholders, community

members and interested parties from both private and public sectors. This group is holding a public meeting on May 4, 2021.

<https://dnr.wisconsin.gov/topic/PFAS/PEAG.html>

**Public meetings** are being held for PFAS contamination in the following areas:

- Town of Campbell and French Island  
<https://dnr.wisconsin.gov/topic/PFAS/Campbell.html>
- Marinette and Peshtigo area  
<https://dnr.wisconsin.gov/topic/PFAS/Marinette.html>

**PFAS rulemaking** is underway in Wisconsin, affecting the following DNR rules:

- [NR 105 Surface Water Quality Criteria Changes](#) - Permanent revisions have been proposed to add surface water quality criteria and analytical methods for poly- and perfluoroalkyl substances (PFAS) including PFOS, PFOA, and any other PFAS for the purpose of protecting public health as well as revisions to the procedures in the Wisconsin Pollutant Discharge Elimination System (WPDES) permitting program to implement the new water quality criteria
- [NR 140 Groundwater Quality Standards Update](#) – EIA public comment period will be followed by public hearings and public comment period on the proposed rule in summer/fall 2021.
- [NR 809 Safe Drinking Water Standards Update](#) - New drinking water maximum contaminant levels have been proposed in a permanent rule change, including per- and polyfluoroalkyl substances (PFAS), perfluorooctanesulfonic acid (PFOS), and Perfluorooctanoic acid (PFOA).

### **Other Regulatory Updates:**

On Jan. 23, 2019, the Natural Resources Board (NRB) approved statements of scope for emergency and permanent rulemaking.

Following recent legislative changes to statute and changes in terms and practices that occur over time, **DNR is revising specific sections of chs. NR 700-799, Wis. Adm. Code**, to meet three main goals:

1. Meet an emergency rulemaking mandate within 2015 Wis. Act 204 relating to new financial assurance requirements for certain types of contaminated sediment sites;
2. Attain consistency with statutory revisions made by 2017 Wis. Act 70 and 2015 Wis. Act 204, including revisions relating to contaminated sediments; and
3. Update references and clarify requirements and procedures as needed since the last set of rule revisions became effective in 2013.

**Update:** The Natural Resources Board (NRB) adopted a modified version of the permanent rule at the April 14, 2021, NRB meeting. The adopted rule (board order RR-10-17) is available online as part of the [NRB's agenda](#). The DNR submitted the rule for the approval of the Governor and, if it is approved, will submit the rule for legislative review.

The **Contaminated Sediments External Advisory Group** is in the process of meeting publicly to discuss implementation of financial assurance provisions within proposed permanent rule RR-10-17. Details on meetings are available on the [Contaminated Sediments External Advisory Group web page](#).

The Wisconsin Department of Natural Resources (DNR) is currently updating the **NR 151, Wis. Adm. Code regarding nitrate pollution in groundwater**.

The rule amendment proposes to establish agricultural nonpoint source performance standards targeted to abate nitrate pollution in areas of the state which are susceptible to groundwater contamination such that compliance with the nitrate standard can be achieved.

The DNR held a 30-day public comment period for the draft economic impact analysis (EIA) of the draft rule, ending on April 10, 2021.

Public hearings will follow in summer 2021.  
<https://dnr.wisconsin.gov/topic/nonpoint/nr151nirate.html>

The WDNR Natural Resources approved rule changes in January concerning the department's regulation of **nonferrous metallic mining activities**. The proposed rules cover the range of activities regulated under the mining and solid waste laws-- from the exploration for minerals, to the reclamation, closure and long term care of a mining site.

Significant changes to the rules include:

- Development of a separate regulatory framework pertaining to bulk sampling;
- Incorporation of changes to the permit review process, groundwater protection provisions and financial assurance mechanisms resulting from Act 134;
- Removal of specific provisions as directed in Act 134; and
- Inclusion of provisions requiring applicants and regulated entities to provide an increased level of detail in certain application and approval submittals.

The proposed rules include modest increases in fees related to exploration license applications and drill hole fees, and fees recovered through the regulatory review of prospecting and mining projects. In addition, costs to mining project applicants are expected to increase due to the increased level of detail and additional reports required as part of the application and approval submittals.

### **Regulatory Related News:**

Wisconsin Manufacturers and Commerce (WMC) and Oconomowoc-based dry cleaner Leather Rich filed a complaint in February in Waukesha County Circuit Court against WDNR, DNR Secretary Preston Cole and the Natural Resources

Board alleging WDNR overstepped its authority by requiring businesses to investigate and clean up PFAS chemicals as part of state environmental cleanup programs.

The 2021 Registered **Laboratory of the Year Award** was presented to the Plymouth Utilities Wastewater Treatment Plant.

### **Professional License Bills in Wisconsin and Illinois Introduced**

2021 ASSEMBLY BILL 298 was introduced on May 3, 2021 by Representatives THIESFELDT, MURSAU, ALLEN, BOWEN, BRANDTJEN, EDMING, HORLACHER, RAMTHUN, STUBBS, SUBECK, TUSLER and WICHGERS, cosponsored by Senators JACQUE, NASS and L. TAYLOR. Referred to Committee on Regulatory Licensing Reform. It is an ACT to create 45.44 (3) (c) 3. Of the statutes; relating to: license fee waivers for veterans' spouses. Under current law, veterans are eligible for a fee waiver for a variety of State-issued licenses and certifications, including Department of Natural resources licenses, certain occupational licenses, and other miscellaneous licenses. This bill expands eligibility to include the spouse of any veteran included in the current fee waiver program.

Illinois also introduced a licensure Bill.

Illinois HB 2776 2021-2022 - Geologist Licensure introduced on February 18, 2021 by State Representative LaToya Greenwood D. The bill would amend the Civil Administrative Code of Illinois to provide that service members and their spouses may engage in the practice of their occupation or profession without being licensed in the State of Illinois, subject to outlined circumstances and limitations. Provides that each director of a department that issues an occupational or professional license shall verify that the existing license for a service member or military spouse is in good standing from any state, commonwealth, or territory of the United States or the District of Columbia. Provides that if an

existing license for a service member or military spouse is in good standing, the Department of Financial and Professional Regulation shall waive any examination, educational, or experience requirements enabling exception to state licensure requirements. Provides that a department may adopt any rules necessary for the implementation and administration of provisions regarding military license exceptions and by rule shall provide for fees for administration.

## Early Career Professional Notes

By Rebecca Butcher



Photo Credit: Rebecca Butcher, Wood PLC

### Dare Mighty Things

I am a volunteer for Letters to a Pre-Scientist and I was asked to give inspirational advice on a career in STEM to my 5th grade student. We had been exchanging letters to for over a year at this point, so saying goodbye was bittersweet. However, as we early career “young” professionals are way past the 5th grade, I think some of the advice I gave still holds true.

For my letter, I decided to share a quote I have always loved that you may find interesting. When I worked at the NASA Jet Propulsion Laboratory, JPL, their quote was always “Dare Mighty Things.” I am not sure if you saw pictures of the new rover landing on Mars, but the parachute had this quote as a hidden message in it, to “Dare Mighty Things”.

The full quote is:

*“Far better is it to dare mighty things, to win glorious triumphs, even though checkered by failure... than to rank with those poor spirits who neither enjoy nor suffer much, because they live in a gray twilight that knows not victory nor defeat.”*  
- Theodore Roosevelt, 1905

Though we may not be landing rovers on Mars as young professional geologists, or even doing anything remotely related to geology at this point, we are still able to Dare Mighty Things.

Following your dreams may feel impossible at this time, given a global pandemic on top of life’s regular burdens, but we still have the opportunity to focus on the small pieces of our larger story.

If you have free time, learn to program a language, learn about ArcGIS or any other technology or software can help you open doors to interests you may never know you had. Taking chances whether it be starting college at 30 or picking up programming can only teach you something about yourself and as young professionals, we are still learning about ourselves.