

2019 Annual Conference

GROWTH
THROUGH
COLLABORATION



May 8-10, 2019
Wyndham Garden Hotel
State College, Pennsylvania

SCHEDULE

WEDNESDAY, MAY 8, 2019

- 12:00 pm** Registration open
- 9:00 am – 5:00 pm** PAEP Short Course: **Understanding the (Soil) Science of the Hydric Soil Indicators** – Mike Callahan, CPSS; Gary Jellick, CPSS; Dr. John Wah; Joe Valentine; and Steve Dadio, CPSS, Soil Hub – The use of the hydric soil indicators into three-parameter wetland delineations has raised the bar on understanding the role of soils in wetland determinations. However, like any advancement in scientific application, the divide between intent and application can be wide as field practitioners struggle to comprehend the intention of the many-nuanced and often-updated hydric soil indicator definitions. In this one-day workshop, we will spend some time reviewing the science that drives the hydric soil indicators and then put that knowledge to use in the field. Special attention will be placed on understanding the nuances of the indicator criteria. We'll also demonstrate a new approach to monitoring reducing conditions in soils that is both cost effective and easy to deploy.
- The cost for this course (includes all materials, morning refreshments, lunch, and afternoon break) is \$99 for PAEP and PCPG members and \$129 for non-members. In order to register for this course (**it is not included in the PAEP Conference registration fee**), please complete the requested information on the registration page. *Note: Registration cut-off date for PCPG or PAEP members is **April 25**. Non-member cut-off is **April 23**. We strictly adhere to these cut-off dates in order to adequately prepare for the course.*
- 2:00 – 6:00 pm** Exhibitor setup
- 6:00 – 7:15 pm** **Welcome Reception** – Heavy hors d'oeuvres/cash bar with exhibitors
- 7:15 pm – ????** **Quizzo** – A great time was had by all last year, so we have been asked to do this again. Join your friends and colleagues and test your knowledge of PAEP history, industry-related information, and general trivia. You can come with a pre-formed team or join one on site. Either way, it will be a great night of fun and sharing knowledge.

THURSDAY, MAY 9, 2019

- 7:00 am** Registration open
- 7:30 – 8:30 am** Continental breakfast with exhibitors
- 8:30 – 8:45 am** Welcome: PAEP President
- 8:45 – 10:15 am** **Regulatory Update from USACE and PA DEP** – David S. Goerman, Jr., PADEP, and Frank Plewa, US Army Corps of Engineers – A variety of topics will be discussed that are related to changes or updates to the Corps 404 and PA DEP Ch. 105 programs, including wetland ID issues and wetland science as they relate to regulatory actions, finalization of the Function Based Aquatic Resource Compensation Protocol (310-2137-001) technical guidance, mitigation banking update, and program development projects that are under way or nearing completion.
- 10:15 – 10:30 am** Break with exhibitors

10:30 – 11:45 am

PADEP/USACE/PennDOT Permitting Panel Discussion – As part of PAEP’s continuing effort to educate environmental professionals, feedback was solicited from PennDOT, PADEP, and USACE Permit Reviewers, to identify reoccurring issues that cause permit review deficiencies and delays. This session will be moderated by Mark Lombard, Environmental Section Chief of PennDOT Central Office, with panelist from the consultant community including Danielle Elwell from Michael Baker International; John-Thomas Graupensperger, PWS, from Pennoni; Michael Kenawell from Johnson, Mirmiran & Thompson, Inc.; and Joseph Musil Jr., PE from Urban Engineers, Inc. The panelists will discuss the top most reoccurring issues that reviewers are faced with, along with presenting solutions that the panelists have developed in order to minimize and/or eliminate these issues, as part of their submissions.

12:00 – 1:30 pm

Luncheon and Keynote Presentation: Bikes, Rails, Trails, Planes, Automobiles – All Things Multimodal – Jennie Granger, AICP, PennDOT Deputy Secretary for Multimodal Transportation – Please join us for our luncheon as Keynote Speaker, Jennie Granger, AICP, PennDOT Deputy Secretary for Multimodal Transportation, will present an update on Act 89 and the Multimodal Transportation Fund. As part of her presentation, you will have the opportunity to learn about what funding opportunities are available, who can use the funds, and how to secure the funds to ensure that safe and reliable systems of transportation are available to the residents and visitors of Pennsylvania.

1:30 – 2:00 pm

Dessert with exhibitors

2:00 – 2:50 pm

Breakout Session: **PennDOT Environmental Updates and Call for innovations** – Virginia M. Bailey, McCormick Taylor, Inc., and Mark D. Lombard, PennDOT – The session will provide environmental professionals with an update of what’s new and upcoming in transportation project delivery from the Environmental Policy and Development Section Chief. This will include a discussion of the latest policies, procedures, handbooks/manuals, and permitting updates. Additionally, a portion of the session will be dedicated to a call for new ideas/innovations from conference attendees for the PA State Transportation Innovation Council (STIC) Environmental Work Group.

Breakout Session: **Citizen’s Advisory Council—Overview and Update** – Keith J. Salador, Esq., PADEP – The Citizens Advisory Council (CAC) to the Pennsylvania Department of Environmental Protection was legislatively created in 1971. This legislation, which created the original Department of Environmental Resources, gave the CAC the following charges:

- The council shall review all environmental laws of the Commonwealth and make appropriate suggestions for the revision, modification, and codification thereof.
- The council shall consider, study, and review the work of the Department of Environmental Protection, and for this purpose, the council shall have access to all books, papers, documents, and records pertaining or belonging to the department.
- The council shall advise the department, on request, and shall make recommendations upon its initiative, for the improvement of the work of the department.
- The council shall report annually to the governor and to the general assembly and may make such interim reports as are deemed advisable.
- The 1992 amendments to Pennsylvania’s Air Pollution Control Act added to these charges by requiring DEP to consult with the council in developing state implementation plans and regulations to implement the federal Clean Air Act.

This presentation will provide an overview of CAC, an update on CAC’s latest actions, and an invitation to the environmental professional community to use CAC as a mechanism to collaborate.

2:50 – 3:00 pm

Break

3:00 – 3:50 pm

Breakout Session: **FHWA Regulation and Policy Updates** – Camille Otto, PA Division of Federal Highway Administration – Our presenter will discuss recent changes in regulations and policies, including but not limited to:

- The Final Rule for 23 CFR 771 and 774 was published on October 29, 2018, updating the National Environmental Policy Act (NEPA) and Section 4(f) requirements for FHWA, FTA, and FRA to address programmatic approaches in environmental reviews included in the FAST Act as well as other changes.
- Program Comment to Exempt Consideration of Effects to Rail Properties within Rail Rights-of-Way: This program comment exempts undertakings that may affect historic rail properties within rail ROW from Section 106 of the National Historic Preservation Act (NHPA). FHWA will discuss the two-pronged approach and provide an update on the status and interpretations.

Breakout Session: **A Field Study of Biochar Amended Soils: Water Retention, Infiltration, and Nutrient Removal from Stormwater Runoff** – Joseph D. Brown, Sr., Rummel, Klepper & Kahl, LLP – The amendment of biochar into roadside greenways represents an opportunity to improve local infiltration and treatment of urban stormwater runoff through the enhancement of existing roadside filter strips and swales without the high costs of purchasing additional highway right-of-way or constructing new stormwater BMPs. These principles could easily be allied to the treatment of stormwater runoff in urbanized areas where open pervious infiltration space is at a premium. This research project evaluates the effects of biochar amendment in roadside soils on the soils' water retention and infiltration characteristics, as well as biochar's ability to remove nutrients and suspended solids from stormwater runoff. Benefits of this include reduced stormwater runoff rates and volumes and increased groundwater recharge. Biochar also promotes microbial activity while increasing the residence time of water in soils, greatly enhancing denitrification and the pollutant removal capacity of the soils. In this study, a 4% mix (by mass) of commercial wood biochar, pyrolyzed at 550° C, was amended into existing roadside filter strips and a swale located along a major highway in Delaware. Roadside filter strips amended with or without biochar were carefully instrumented to measure infiltrating water quality, soil moisture, and surface runoff quantity and quality entering and exiting the filter strips. Results for over 125 storm events, measured over the last three years, show that the addition of biochar to the roadside soils decreased the stormwater peak runoff rates by an average of 80% and cumulative runoff volumes by an average of 85%. When compared to soil tillage alone, biochar reduced the peak runoff rate by 56% and the total runoff volume by 68%, respectively. The effect of biochar amendment on reducing stormwater quantity and improving stormwater quality will be presented.

3:50 – 4:00 pm

Break

4:00 – 4:45 pm

Breakout Session: **Fixing Flooding: The Indiana County Stormwater Education Partnership Story** – Ian Darragh, Indiana University of Pennsylvania; Matthew A. Genchur, White Township; and Erin M. Janetski, Indiana University of Pennsylvania – The Indiana County Stormwater Education Partnership (SEP) was formed in 2014 as a result of a small grant that some partners in the Indiana, Pennsylvania, community received. The grant resulted in a workshop, held in early 2015, that was geared toward stormwater management with a focus on educating local municipalities about the basics and challenges of stormwater management. Since that workshop, the SEP has expanded to include several more partners, one important one being Indiana University of Pennsylvania (IUP), spanning several academic departments. The SEP/IUP partnership has led to multiple grant awards that have allowed the community to install data loggers in our local streams, establish a rain gauge network to better study rainfall patterns, and collaborate with the Indiana Area School District at various levels to engage students with their local environment. All of these efforts are building an important knowledge base that will allow our local leadership to make more informed decisions while attempting to solve our local flood and stormwater concerns.

Breakout Session: **A Fresh Breath for Sustainable Development: Meeting Indoor Air Quality Standards with Engineered Vapor Mitigation Systems** – Daniel C. Leandri, Pennoni Associates, and D. Justin Wilkinson, Pennoni Associates – Sub-slab depressurization systems are an effective means of preventing the migration of hazardous subsurface vapors into commercial and public buildings. Increasingly, vapor intrusion (VI) is a predominant topic to environmental due diligence and brownfield site development. This presentation will discuss the increasing awareness and regulations pertaining to VI and indoor air quality, and design/construction considerations of sub-slab depressurization systems, and alternative VI mitigative methods. These topics are of particular importance in Pennsylvania and New Jersey where radon is prevalent; but also, at brownfield redevelopment sites where legacy soil, groundwater, or fill have the potential to release vapors that would be a source of health impacts to a building's occupants for quite some time past the redevelopment schedule. Hazardous gases such as radon resulting from the decomposition of naturally-occurring uranium, or volatile organic compounds off-gassing from subsurface plumes of petroleum or chemicals may exist beneath a new development or redevelopment projects. Mitigating the intrusion of these gasses into occupied spaces to achieve acceptable indoor air quality is important for the public health, reduction of long-term liability, and achieving regulatory acceptance for development of impacted property. Pennoni has completed multiple sub-slab vapor depressurization (SSD) system designs that are constructed to mitigate the potential hazards of vapor intrusion into building spaces. Projects include new and retrofit designs of private and public-school development, commercial centers, military installations, and shopping malls. Active or passive SSD systems are effectively used to mitigate hazardous conditions and health concerns for the future building occupants.

4:45 – 5:45 pm

Breakout Session: **Chapter 105 Compensatory Mitigation Program Changes** – David Goerman, Jr., PADEP – Mr. Goerman will provide an overview of the final technical guidance – “Pennsylvania Function Based Compensation Protocol” (Doc Id: 310-2137-001). This presentation will provide an overview of the finalized technical guidance and the revisions made as a result of public comment. This guidance specifically establishes the system to determine compensatory mitigation requirements and value compensation proposals. The guidance applies to mitigation evaluations performed for planning and permitting requirements to comply with 25 Pa. Code Chapter 105 regulations. Typical project examples will be provided covering the factors to consider when performing the evaluation to quantify compensatory mitigation requirements and proposals intended to meet the 25 Pa. Code Chapter 105 regulations. This guidance is intended for use with the three Level 2 Resource Condition Assessment Protocols (310 2137 002, 310 2137 003, and 310 2137 004).

Breakout Session: **Unconventional Oil & Gas Restoration Best Practices and Habitat Enhancement Project** – Jeremy Matinko, Range Resources - Appalachia, LLC – The first part of the presentation will describe the basics of surface restoration associated with unconventional oil and gas development, focusing on best practices common across the industry. The second portion of the presentation will discuss and highlight a successful habitat enhancement project made possible through industry and agency collaboration.

6:00 – 6:30 pm Reception with exhibitors

6:30 – 8:30 pm Dinner and Awards Presentation – Following dinner, PAEP will recognize and present awards to this year's winners of the Karl Mason and Walter Lyon awards for their individual or organization's contribution to the field of environmental management in Pennsylvania. PAEP will also present the freshman/sophomore and junior/senior/graduate scholarship winners for 2019.

FRIDAY, MAY 10, 2019

7:30 am Registration open

7:30 – 8:30 am Continental breakfast with exhibitors

8:30 am – 9:15 am

Breakout Session: **Finding Pennsylvania's Solar Future** – Allen P. Landis, PADEP – Finding Pennsylvania's Solar Future is a 2017-2019 statewide planning project being led by the DEP Energy Programs Office (EPO) to equip Pennsylvania to produce more solar energy by 2030. The project team, consisting of solar experts from across the state, set a target of 10 percent retail electric sales from in-state solar energy sources by 2030. This target was selected as a level that could be achievable but would also challenge the business-as-usual model and allow for the development of a variety of strategies that could be pursued. To meet this goal, Pennsylvania must install about 11 gigawatts of solar energy, a significant increase from the roughly 300 megawatts currently installed in the state. Since the Finding Pennsylvania's Solar Future planning project began in January 2017, the project group has completed a modeling process that reflects the knowledge and perspectives of over 550 expert stakeholders statewide, provided through public meetings, webinars, and working group discussions. This work resulted in the development of the Finding Pennsylvania's Solar Future draft plan, which was released for public comment on July 7, 2018. Five main strategies, incorporating both decentralized approaches (e.g., solar panels on homes) and larger, utility-grid-scale development were analyzed: 1) Increase the Alternative Energy Portfolio Standard requirements for solar to 4-8 percent by 2030; 2) Provide customers access to capital, including provision of loan guarantees; 3) Adopt carbon pricing; 4) Create uniform policies for siting and land use; and 5)

Consider tax exemptions that encourage solar deployment and assist solar projects in finding project sponsors with tax equity. Ten other strategies focusing on increasing either small, decentralized projects or grid-scale solar projects in Pennsylvania are also detailed. The plan is currently being finalized and is expected to be released later this year. The project continues, with stakeholder meetings set for November and March, where the discussion will focus on how to implement and support the strategies identified in the plan. This project is an excellent example of collaboration between multiple levels of government, as well as stakeholders from nonprofits, academia, industry, utilities, and more.

Breakout Session: **Response of a Streambank Piezometer to Flood Events in the 2018 Summer Season** – Teresa A. Blauch, Buchart Horn, Inc., and Kevin L. Hoover, Buchart Horn, Inc. –

The Susquehanna River Basin Commission is requiring aquifer testing by a small public water supply company as part of the registration process for two of their existing supply wells located in Lancaster County, Pennsylvania. This has included installation of a streambank piezometer and surface water stilling well with continuous data loggers to monitor nearby Chiques Creek. Shortly after construction in June 2018, these instruments were subjected to a series of large flood events associated with record high precipitation in July and August and the remnants of Hurricanes Gordon and Florence in September. The response of streambank groundwater elevations to these events is presented, along with recommendations for streambank piezometer installation and monitoring methods in light of increasing storm frequency and severity associated with climate change.



9:15 – 9:30 am

Break

9:30 – 11:00 am

We All Live Downstream: Clean Water Implications for State Water Policy – Taylor J. Nezat, PennFuture, and Ezra P. Thrush, PennFuture – Our presenters will be covering the Phase III WIP development in Pennsylvania, as well as federal and state policy. Taylor Nezat will begin the presentation giving a brief history of the TMDL set forth by EPA, as well as the current standing Pennsylvania is in, where we need to make improvements, and why we are so far behind. Ezra Thrush will then talk about the role the federal government plays in clean water, including the Clean Water Rule, the Farm Bill, Infrastructure, and Appropriations. After he covers federal policy, he will then move into state policy, specifically focusing on a few bills that PennFuture has been tracking since the start of 2018, including, but not limited to: SB 792, SB 799, Growing Greener III, and a Dedicated Clean Water Fund (HB20), as well as several others. After state policy has been covered, we will tie it all together and express how all of these things are harmonious, as well as establishing the land and conservation connection and why it is so essential to do this work. The premise of this presentation is to make the audience aware of some of the shortcomings we are facing in the Commonwealth, and what is being done to address these issues, as well as where people can get involved.

11:15 am – 12:30 pm

General Membership Meeting/Board of Directors Meeting

12:30 pm

Conference adjourns

1:00 pm

Enjoy a little leisure time with your PAEP colleagues with a 9-hole round of golf. What a great way to relax and discuss the great conference. The cost is \$35 per-person and will include the cart and greens fees. This is payable on-site, but we would like to know in advance if you plan to play.

ONSITE SERVICES

HOTEL

Wyndham Garden Hotel

310 Elks Club Road
Boalsburg, PA 16827
(814) 466-2255
www.wyngardenstatecollege.com

Group Room Rate: \$129.00 Single/Double Occupancy (plus applicable taxes)

Reservations: To make your room reservation, please call (814) 466-2255 and mention PAEP to receive the group rate. Reservations must be made no later than **Monday, April 8**. Please note that the available room block may fill prior to the aforementioned cut-off date. Reservations made after the cut-off date, or if the room block has been filled, will be accepted based upon availability with the group rate. Be sure to call early! Directions can be found on the hotel web site <https://www.wyngardenstatecollege.com>. Also, a limited number of rooms are available at the government per diem rate.

IMPORTANT DEADLINES

April 8: Wyndham Garden Hotel group rate reservation cut-off date

April 19: Registration form due to PAEP

April 26: Cancellations must be received in writing to receive a refund. No refunds after this date.

Questions?

Contact the PAEP Registration Office at (814) 355-2467 or info@paep.org. Visit our website at www.paep.org.

REGISTRATION INFORMATION

Full Registration: Includes opening reception and Quizzo event on Wednesday, May 8, and all sessions and meals on Thursday, May 9 and Friday, May 10. PAEP Short Course is NOT included. Non-Member Full Registration Fee includes PAEP Membership fee for 2019.

Single-Day Registration: Includes all sessions, meals, and materials for that specific day. (This fee does not include PAEP membership dues for non-members.) PAEP Short Course is NOT included.

Students: If you are a student and interested in attending the conference, please contact either Kristin Aiosa at KAiosa@jmt.com or Mike Kenawell at MKenawell@jmt.com for details. You must be a current PAEP member for the member rates to apply.

PAEP Short Course: The cost for this course (includes all materials, morning refreshments, lunch, and afternoon break) is \$99 for PAEP and PCPG members and \$129 for non-members. In order to register for this course (it is not included in the PAEP conference registration fee), please complete the requested information on the registration page. **Note:** Registration cut-off date for PCPG or PAEP members is **April 25**. Non-member cut-off is **April 23**. We strictly adhere to these cut-off dates in order to adequately prepare for the course.

Continuing Education: Although PAEP conferences are not officially certified to provide credit, attendees will be provided documentation of their attendance and training in the form of a certificate, upon request.

SPONSORSHIP AND EXHIBITION

PAEP welcomes sponsors for various conference events, as well as exhibitors. Sponsor logos will be highlighted on PAEP's website, in the conference program, and at the conference. Exhibitors will be provided with a six-foot draped table. Please contact Keith McNally at (717) 272-5114 or PAEP headquarters at info@paep.org or (814) 355-2467 for information.

CANCELLATIONS

All cancellations must be made in writing to PAEP and received by April 26, 2019 in order to receive a refund. All registrations will incur a \$25 non-refundable processing fee. No refunds will be given for cancellations received after this deadline or for 'no shows.'

2019 PAEP ANNUAL CONFERENCE REGISTRATION FORM

(Please use one registration form per person.)

NAME BADGE NAME

COMPANY

ADDRESS

CITY STATE ZIP CODE

EMAIL TELEPHONE

Select days/ activities you will be attending	Type of Registration	Member Rate	Student Rate	Non-Member Rate	Total Due
	Full Registration	\$310.00	\$160.00	\$380.00	\$
	Wednesday, May 8, Short Course	\$ 99.00	\$ 99.00	\$129.00	\$
	Wednesday, May 8, Reception	\$ 35.00	\$ 35.00	\$ 45.00	\$
	Thursday, May 9, One-Day Rate	\$240.00	\$ 75.00	\$285.00	\$
	Thursday, May 9, Reception/Dinner	\$ 55.00	\$ 35.00	\$ 60.00	\$
	Friday, May 10, One-Day Rate	\$125.00	\$ 25.00	\$190.00	\$
	Late Fee after April 19	\$ 30.00	N/A	\$ 30.00	\$
	Friday, May 10, 9-Hole Golf Outing Fee \$35 and payable at time of Golf				\$
TOTAL AMOUNT ENCLOSED					\$

Notes:

* Full Registration includes attendance at each of the day's events and meals for that day. PAEP Short Course is NOT included.

___ Check here if you require any special dietary attention or have a disability and require accommodations in order to fully participate in this meeting. You will be contacted by a PAEP staff member to discuss your specific needs.

___ Check here if you would agree to supporting the PAEP Student Scholarship Fund by donating a themed basket for the conference.

► **PAYMENT**

Payment type (select one): ___ **Check Enclosed** (payable to PAEP) ___ **MasterCard** ___ **Visa**

Credit Card # Expiration Date CCV#

Signature (credit card orders only)

► **MEAL ATTENDANCE CONFIRMATION** (please complete)

Please confirm which scheduled meal function(s) you will be attending based on the type of registration you have selected above so we may include you in our counts to the hotel: (check all that apply)

___ **Wednesday, May 8, Opening Reception** ___ **Thursday, May 9, Reception/Dinner** ___ **Friday, May 10, Breakfast**

I give permission for PAEP to disseminate my name and contact information (i.e. list of attendees) at the conference. ___ **YES** ___ **NO**

Signature: _____ Date: _____

► **REGISTRATION PROCEDURE**

Please complete and return this registration form along with payment to:

Pennsylvania Association of Environmental Professionals
174 Crestview Drive, Bellefonte, PA 16823-8516
Phone: 814.355.2467 | Fax: 814.355.2452

If payment is made by check, make payable to **PAEP**. If payment is made by credit card (MasterCard or Visa), you may fax this form. We are unable to accept registrations over the telephone. Please note that registrations will not be processed without payment.

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