



Collaborators at the local environmental summit

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Local Environmental Groups Join to Share Ideas

By Doug Mason

The Nittany Valley Environmental Coalition (NVEC) and the Sierra Club Moshannon Group hosted a First Gathering of Central Pennsylvania Environmental Leaders on March 15 at the Centre County Unitarian Universalist Fellowship Church in State College. Over 75 movers and shakers representing about a dozen counties and thirty organizations attended the inaugural event.

"It was honor to represent the State College Bird Club and to be in a room filled with compassionate and inspiring people," said Doug Wentzel, president of the 80-year-old club. "So many organizations

the environment and it was uplifting to learn of our collective efforts. I look forward to continuing the conversations and moving to take collaborative actions to protect and enjoy our wild places."

Each environmental group was given two minutes to give a formal description of the group's goals and what the organization had been focusing upon in the previous year, accompanied by slides and/or PowerPoint.

"It is wonderful to know how many folks are working out there to improve the environment," observed NVEC president Dorothy Blair, who conceived of the

Environmental summit. . "Each group is working on something significant, and each approach to addressing an environmental need is different, from bird welfare, to water quality, to political persuasion."

The event took about three hours. Individuals had a chance to mix during the potluck. Moshannon Group and NVEC are discussing holding a longer 2nd Central Pennsylvania Environmental Leaders Gathering for a day (or a weekend) at a centrally located state park or suitable facility in summer 2025 so that folks get a better opportunity to get to know each other.

A Summary of the Spring Creek and Bald Eagle Creek PFAS Water Survey

By David Thomas Roberts

Spring Creek is a high quality karst cold water native trout fishery that features Fisherman's Paradise - the oldest fly fishing only water in the US, the major Benner Spring, the historic Spring Creek Canyon, several parks, hike & bike trails, and two trout fish hatcheries. Bald Eagle Creek is a popular warm and cold water fishery sourced by tributaries from the Allegheny Front Plateau and the Appalachian Ridge and Valley Province that runs along Bald Eagle Valley from Tipton to Loch Haven, PA.

PFAS compounds (Per & poly Fluoro Alkyl Substances) have been found to be persistent contaminants in the surface waters of Spring Creek and in water wells near the State College Regional Airport in Benner Township, Centre County.



Spring Creek Canyon near Benner Spring, Bellefonte

The Moshannon Group received a PA Chapter Conservation Grant in 2022 to conduct an environmental survey of Spring Creek and Bald Eagle Creek for PFAS contamination to follow up to a previous survey by Moshannon Group - *See PFAS in the Spring Creek and Bald Eagle Creek Watersheds, Spring Creek Watershed Atlas.*

PFAS are a large group of fluoro-carbon, perfluoroalkyl chemical compounds causing widespread persistent toxic contamination of our soils, waters, and air. PFAS have been linked to cancer, childhood development problems, negative reproductive health,

problems with endocrine health, immunological health, kidney function, thyroid function, and other metabolic processes. PFAS are persistent “forever” anthropogenic pollutants entering the environment via pathways such as the use of fire-retardant aqueous film-forming foam (AFFF) near airports and military bases, household waste disposal, manufacturing waste discharge, wastewater treatment plant effluent, and contaminated bio-solid application.

This survey collected water samples from 15 sites for analysis including water quality network sites on Spring Creek near Fisherman's Paradise and Bald Eagle Creek near historic Curtin Village, United States Geological Survey monitoring sites, Centre County Pa Senior Environmental Corp water quality monitoring sites, the Benner Spring in Spring Creek Canyon, Buffalo Run, State College Regional Airport (UNV) stormwater discharge sites, and wastewater effluent discharge from the University Area Joint Authority and Bellefonte Borough Authority treatment plants.

There are several sources replenishing the PFAS in Spring Creek. PFAS were detected in State College Regional Airport stormwater discharges to Spring Creek and to the Big Hollow groundwater

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PFAS Water Survey (continued)

area in Benner Township, Centre County. PFAS were found in wastewater effluent from the University Area Joint Authority and Bellefonte Borough Authority treatment plants.

There are several sources replenishing the PFAS in Spring Creek. PFAS were detected in State College Regional Airport stormwater discharges to Spring Creek and to the Big Hollow groundwater recharge area in Benner Township, Centre County. PFAS were found in wastewater effluent from the University Area Joint Authority and Bellefonte Borough Authority treatment plants. Benner Spring, a major karst dolomite spring in Spring Creek Canyon is also contaminated with PFAS.

PFAS were found in Spring Creek upstream of Spring Creek Canyon near the I-99 overpass and downstream to WQN 415 at Barns Lane below Fisherman's Paradise. No PFAS were detected in Spring Creek upstream of Spring Creek Canyon and Big Hollow at the USGS Houserville gage. No PFAS were detected in Buffalo Run or at a small karst spring that feeds Buffalo Run. PFAS were detected in airport stormwater and wastewater plant effluents discharging to Spring Creek. The PFAS in Bald Eagle Creek appear to be coming from Spring Creek. PFAS were not detected in Bald Eagle Creek above the confluence with Spring Creek but were detected downstream near Curtin Village at WQN 413.

Stormwater from the State College Regional Airport is a source of PFAS in Spring Creek. The use of aqueous film forming foam (AFFF) containing PFAS during decades of on-site Federal Aviation Agency fire train exercises at the airport has contaminated the airport property with PFAS.

A second source of PFAS is the effluent from the University Area Joint Authority and Bellefonte Borough wastewater treatment plants. PFAS enters the waste water stream through residential use including clothes washing, disposal of products, and from small scale industrial use. The presence of PFAS in treated wastewater effluent indicates there is likely to be PFAS in the bio-solids produced by the wastewater treatment plants. Bio-solids used for farm and consumer use must be tested to protect public health and environmental health.

Other sources of PFAS entering Spring Creek include spring water discharged from the Gatesburg Mines Member aquifer at Benner Spring and well water contaminated with PFAS. These sources are evidence of a PFAS plume in the aquifers of the limestone Gatesburg Formation and the dolomite Mines Member, major and essential water resources supplying water to homes, businesses, industries, agriculture, and water authorities throughout the State College, University Park, and Bellefonte area. A fire training site (FTS) previously operating in Big Hollow contributed to PFAS contamination in the dolomite Gatesburg Formation from the use of AFFF in the 1970's.

People and businesses affected by PFAS contamination must either seek an alternative water source that does not contain PFAS or must treat the contaminated water to protect their



A fisherman in Spring Creek

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PFAS Water Survey (continued)

health and welfare. Activated carbon media is commonly used to remove PFAS from water however spent filters contain concentrated PFAS and must be handled as toxic waste.

Some PFAS is transported downstream into Bald Eagle Creek, the Susquehanna River Basin, and beyond to the Chesapeake Bay. The remaining PFAS is taken up into the local biosphere where it will bio-concentrate and bio-accumulate into aquatic plants and animals including into people who may consume those plants or animals. PFAS found in the springs and wells supplying water to the Benner Trout Hatchery and the Bellefonte Trout Fish Hatchery are of concern. Study of the effects of this PFAS contamination on trout hatchling is needed.

Pennsylvania has a regulatory limit of 14 parts per trillion (ppt) for PFOA and 18 ppt for PFOS in drinking water. The EPA proposes to limit PFOA and PFOS to no more than 4 ppt in drinking water, set a limit on PFHxS, PFBS, PFNA, and HFPO-DA, and list nine PFAS compounds as hazardous under the Resource Conservation and Recovery Act. PFAS compounds must be banned to break the chain of PFAS contamination entering the environment, our water supplies, and our food supplies. Twenty-two states have banned products containing added PFAS. Production and use bans eliminate

exposure routes and reduce PFAS in humans.

A full report - *"Spring Creek and Bald Eagle Creek Surface Water Survey for Per and Poly Fluoroalkyl Substances (PFAS), 2024"* is available on the Moshannon Group's website.

Reflecting on a Successful 2024 Banff Film Festival

By Kelley Forest

As I reflect on my fourth year organizing the Banff Film Festival, I am filled with gratitude and awe. Each year, this festival has brought together our community to celebrate the wonders of the natural world through captivating films that transport us to breathtaking landscapes and inspire us with stories of human resilience and adventure.

I am continually humbled by the generosity of our local sponsors, who make this event possible year after year. Our sponsors this year included Envinity, Nittany Mountain Works/Organic Climbing, Andrew Shubin with State College Law, Appalachian Outdoors, MKC Law, Todd Costello with ReMax, Centre County Recycling and Refuse Authority, Rapid Transit, Shaver's Creek, Webster's Café, Nittany Climb and Kitchen Kaboodle.

As we look ahead to next year's festival, April 4th and April 5th, 2025, may you continue to find inspiration and rejuvenation in the beauty of the natural world, both on the screen and in our own backyards.



Masters of Ceremony Lara Fowler and Jesse Barlow flank Banff Coordinator, Kelly Forest



Sampling sites in red detected PFAS; ones in blue did not.

Josh Shapiro: Environmental Friend or Foe?

*The following is an Op-Ed written by Doug Mason, Dorothy Blair, and Daniel Alters.
It was published in the Centre Daily Times on April 12, 2024.*

Is Governor Shapiro an environmental advocate? Due to his pre-election promise to fight climate change with the *Regional Greenhouse Gas Initiative* (RGGI), we enthusiastically promoted his campaign for governor. RGGI is tragically a missed opportunity.

Shapiro professes an open-door policy. Recently 24 members of PA Action on Climate came to his office, after many attempts to schedule a meeting. They were harassed by police and state troopers on the capital building floor; 3 members were arrested: including Doug Mason, Chair of the 905 member Sierra Club Moshannon Group, representing 10+ central Pennsylvania counties. According to "Penn Live" these three leaders were protesting Governor Shapiro's acceptance of bribes from PA's fossil fuel industry. Gov. Shapiro received our vote because he pledged to honor Gov. Wolf's efforts to join RGGI, a cap and trade program that places a cap on carbon dioxide (CO₂) emitted and auctions credits to raise money for further mitigation: <https://www.rggi.org/> Established by 9 Northeastern states in 2009, RGGI now boasts 11 members, joined most recently by Virginia (2020). CO₂ emissions have decreased sharply for all members. This website helps you understand how effectively RGGI both lowers CO₂ and rewards citizens.

In spite of RGGI's benefits, our legislature's vested interest in fracking has long blocked RGGI membership. Governor Wolf arranged implementation of RGGI through the PA Department of Environmental Protection. By the end of his run for governor, Shapiro quietly waffled on his campaign promise to approve RGGI. His alternate plan has the backing of Republican Senator Gene Yaw and other natural gas profiteers.

RGGI states reduced their total CO₂ emissions by 50% in 12 years. Their cap-and-trade system earned \$60 billion, enabling consumer purchases of electric cars, more efficient furnaces, heat pumps, home insulation, also programs focusing on poor and climate-vulnerable areas. Proceeds also clean up pollution from coal mining, thus decreasing deaths and medical bills from asthma, lung and heart disease, etc.

Why does Shapiro want to avoid RGGI? According to recent news and a direct 4/15/24 communication from Shapiro's office, his RGGI alternative, Pennsylvania Climate Emissions Reduction Initiative (PACER), requires 11 years to reduce PA's emissions by 35%, saving Pennsylvania's 12.8 million "ratepayers \$252 million over the next 5 years:" a whopping \$3.90 per person per year.

PACER caps carbon emissions from "large" power plants; Shapiro will continue to support "key energy industries that have helped Pennsylvania become a national leader" (i.e., natural gas), while creating "new markets for clean energy" (using natural gas to create hydrogen fuel?). To achieve only a 35% decline in CO₂ emissions, Shapiro could be depending on the quickly-declining use of coal in PA power plants as they switch to cheaper natural gas. Governor Shapiro need not lift a finger or



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Shapiro – continued

anger his friends in the PA Senate, and he will turn the natural gas industry into ecstatic political supporters.

Will an increased focus on natural gas (methane) to produce electricity, heat homes and fuel industry improve Pennsylvanian's environment? Replacing coal with methane will in fact reduce CO2 emissions, as well as hazardous particulate pollution and surface environmental destruction.

However, producing and using natural gas releases huge quantities of methane to the atmosphere. Methane is 80 times more powerful than CO2 as a climate change gas during its first 20 years in the atmosphere. Leaks occur during drilling, compression, storage, pipeline delivery, even from furnaces and cooking ranges. An estimated 600,000 illegally abandoned wells contribute more.

People living near these ever-multiplying fracked wells will be exposed to gas and inevitable leaks and spills of toxic chemicals and radioactivity in fracking wastewater. Construction of access roads, well-pads and pipelines destroy our environment, causing tree loss and fragmentation of our state forest lands, and in turn, loss of animal habitat.

Equitrans paid a million+ dollar penalty for a huge leak of methane from their gas storage field in Jackson Twp., Cambria Co. In actuality this amount was only 10% of the DEP-estimated 300,000 tons of leakage of all sources of methane across Pennsylvania for 2022.

https://www.tribdem.com/news/equitrans-to-pay-more-than-1-1-million-penalty-for-2022-gas-leak/article_11b69dc0-f738-11ee-ba1b-43b71e1ebb85.html

The consensus is that methane is now the second largest driver of climate change in the US, and growing. Why does Shapiro endorse a plan unleashing ever more of this powerful climate change gas into our atmosphere, while providing no effective means for mitigation?

<https://www.dep.pa.gov/Business/Air/Pages/Methane-Reduction-Strategy.aspx>



Air National Guard Withdraws Plan to Fly over PA Wilds

By Doug Mason

A proposed change to the Duke Military Operating Area - an Air National Guard flight training region covering part of the Moshannon region (as reported in this newsletter last year) - has been rescinded.

The change would have established the Duke MOA as a low-altitude training area. The proposal came from the Maryland Air National Guard, which has long conducted training drills in the Pennsylvania Wilds area at 8,000 to 17,000 feet above sea level. According to the new proposal, planes could have been flying as low as 100 feet above ground level up to 272 days out of the year.

The proposal would have authorized

Maryland's A-10 Warthogs, New Jersey and D.C. Air National Guard's wings F-16 Fighting Falcons, and other military aircraft including F-22 Raptors and F-35 Lightning IIs, to utilize the airspace.

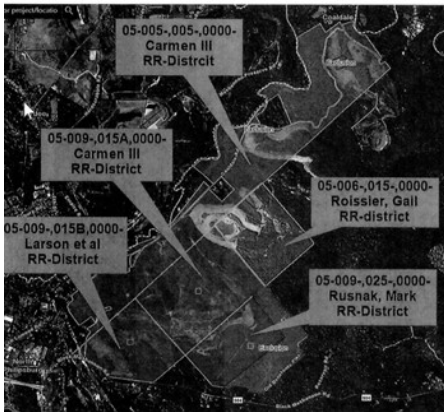
After hearing concerns from North Central Pennsylvania residents and organizations, including the Sierra Club Moshannon Group, U.S. Senators Bob Casey and John Fetterman repeatedly pushed the U.S. Air Force to abandon the plan. The 13-county Pennsylvania Wilds region contains the greatest concentration of public lands in the Commonwealth and accounts for \$1.8 billion in tourism.

Rush Township Zoning Proposal Would Enable Large Solar Farm

By David Thomas Roberts

Rush Township Supervisors propose to amend the Township Zoning Code to create a new zoning overlay for commercial energy production sites, to add 8 parcels to that overlay, and to allow principal solar energy systems in the new zoning district. The Supervisors and the Township Solicitor stated that the proposed zoning amendments will allow for controlled solar energy development.

The Township held a meeting on May 21 to hear comments from the public concerning the proposal. Over 80 people attended and dozens spoke.



Map showing the proposed overlays.

The proposed ordinance would provide zoning standards for solar energy installations including set back, antiglare, fencing, vegetative plantings, and restriction to certain brownfield areas. The parcels within the proposed overlay are old strip

mine sites some that have acid mine drainage feeding into the highly polluted Wolf Run. mine drainage feeding into the highly polluted Wolf Run.

People expressed concern about impact to the water quality of native trout streams and drinking water sources in the Black Bear watershed as well as disruption of natural scenic areas near the Moshannon State Forest and Black Moshannon State Park.

Ampliform solar energy company representatives claim that grading of the sites along with appropriate plantings and stormwater infrastructure can help mitigate mine drainage. It appears that the company is cooperating with the Moshannon Watershed Association in an effort to protect the pristine Black Bear watershed area.

Concern was voiced about leakage of heavy metal toxins from solar panels made in China. Company representatives stated that the solar panels they purchase are made in Canada, not China, and are of a technology that does not use heavy metals such as cadmium, and that the panels are sealed in a plastic made of natural gas. Another citizen concern is that a large-scale solar farm would clearcut an area that is currently forested.

Several people commented that the solar ordinance made sense and a solar use overlay on old mine fields seemed the best use of the land.

The Supervisors made it clear that a zoning amendment to establish a commercial energy

production overlay district in Rush Township does not automatically approve the solar project. Plan submittals and approvals will be required for the solar installation.

The next scheduled meeting is June 11 Tuesday, 4 PM at the Rush Township Municipal Building.

MOSHANNON GROUP NEWS:

The Moshannon Group has endorsed Paul Takac, an environmental champion, for reelection for the 82nd District of the PA House of Representatives.

Please support Paul!



Changes on the Moshannon Group Executive Committee:

Member David Roberts has resigned – he was just too darn busy. Former Excom member,

Ellen Foreman, was elected unanimously to replace him. Thank you, David. Welcome back, Ellen.

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www.sierraclub.org/pennsylvania/moshannon