

Centre County Pennsylvania Senior Environmental Corps April 2023 Newsletter



“Volunteering for future Generations”



RSVP (Retired and Senior Volunteer Program) Centre County, PA Official Website (centrecountypa.gov)
Call: 814-237-0400



clearwater@clearwaterconservancy.org



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Donations may also be made through the ClearWater website.

For other options see: [Donations \(ccpasec.org\)](http://Donations(ccpasec.org))

Thank you for your generous support!

Presidents Report:

Many of our volunteers attended the December 14th Holiday celebration at the Penn Stater organized by Laurie. Special guests included **Ann Donovan** formally Centre County Conservation and **Deb Nardone** Executive Director Centre County Clearwater Conservancy. Photos provided by Susan Robb



Nominations for officers:

Susan Sapp: Officers shall be elected at the Annual Meeting of the membership for a term of one year, and may succeed themselves Re-election of President, Vice President, Secretary and Treasurer. Susan has served two terms as our president and as has been our tradition asked to stepped down. William Smith our quality Control advisor was nominated and elected as our new president at the April 2023 meeting. Carolyn Hatley, Vice President, Rob Fugate Treasure, and Patty DeLotto, Secretary were reelected.

Bill Smith: “I am honored to be nominated to serve as the incoming president of The CCPaSEC. I am looking forward to working with the board, advisors, team leaders, and communicating with our partner groups. It is hoped that, together, we can continue our mission to collect and publish data to monitor the quality of our Centre County streams.”

Presidents Report *continued*

Constitution and By-laws update: The changes made to the constitution and by-laws were approved. In the Bylaws, Article III Section 5 was added to establish the Board of Directors as the Nominating committee for officers, to meet each January or as necessary if an office is vacated during the year. In the Constitution, Article V Section 4 was amended to add "Grants and Funding" to the list of Resource Advisors. In the Bylaws Addendum, Section 12 was added outlining the duties of the Grants and Funding Resource Advisor.

Centre Gives: CCPaSEC received donations of \$1000.00 from Sierra Club and \$75.00 from Centre Gives.

The copyright issue has been resolved: The following statement will appear on our website. "All contents copyright © 2022 by CCPaSEC. All Rights Reserved. No part of this document or the related files may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording, or otherwise) without the prior written permission of the publisher."

CCPaSEC in the News:

Trout Unlimited newsletter had an article by **Dave Roberts** a CCPaSEC member, about PFAS's.

Dave is a member of the Moshannon Sierra Club. David is an avid naturalist holds a bachelor's degree in biology from Penn State University and has over 40 years' experience in environmental protection

What is PFAS?

PFAS is a large group of chemical compounds made up of fluorinated carbon chains with an attached head consisting of a sulfate, carboxylate, or other chemical structure. **PFAS** was found in surface waters of Central PA including in **Spring Creek, Bald Eagle Creek**, Little Juniata and Juniata Rivers, Susquehanna River West Branch, Clearfield Creek, Beech Creek, in the Watersheds

PFAS Test Results:

PASEC PFAS Sample Site No. 1 - **Spring Creek** WQN 415 Barns Lane & Spring Creek Road PFOS **2.3 ppt**, PFOA **2.0 ppt**, PFHxA **2.4 ppt** No other PFAS detected. This data confirms the continued presence of PFAS contamination in Spring Creek near Fisherman's Paradise.

PASEC PFAS Sample Site No. 2 - **Bald Eagle Creek** WQN 413 at Curtin Village Access Point No detectable levels of PFAS. High stream flow may have affected the sample through dilution.

PASEC PFAS Sample Site No. 11 - Karst Spring at 2023 **Buffalo Run Road, Bellefonte** feeding into Buffalo Run to the NE of University Park Airport. The spring had no detectable levels of PFAS

By David Roberts A report on PFAS in the Spring Creek and Bald Eagle Creek watersheds may be found at [https://www.springcreekwatershedatlas.org/post/pfas-in-the-spring-creek- and-bald-eagle-creek-watersheds](https://www.springcreekwatershedatlas.org/post/pfas-in-the-spring-creek-and-bald-eagle-creek-watersheds).

continued

The Pennsylvania Bulletin: Saturday, January 14, 2023

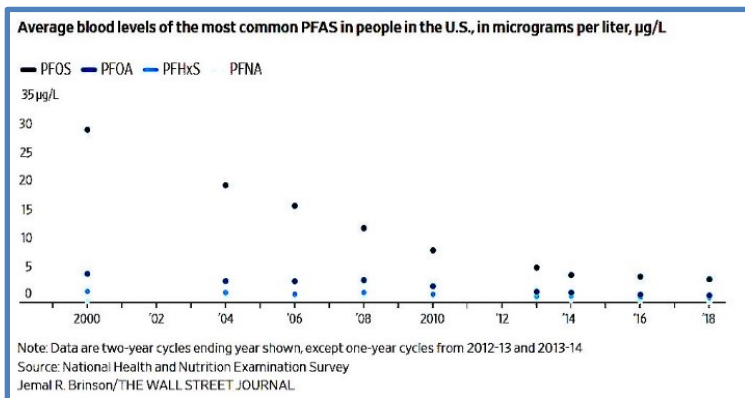
The Environmental Quality Board (Board) amends **Chapter 109** (relating to safe drinking water) to read as set forth in Annex A. This final-form rulemaking will improve public health protection by setting maximum contaminant level goals (MCLG) and maximum contaminant levels (MCL) for two (2) per- and polyfluoroalkyl substances (PFAS)—perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) acid (PFOS). Currently, seven states have set MCLs or other regulatory limits for one or more PFAS—Massachusetts, Michigan, New Hampshire, New Jersey, New York, Vermont and Washington.

[Pennsylvania Bulletin \(pacodeandbulletin.gov\)](http://pacodeandbulletin.gov)

THE WALL STREET JOURNAL

The Environmental Protection Agency is proposing the first [federal limits for six PFAS chemicals](#) in drinking water. In March, the Environmental Protection Agency proposed the first federal limits on PFAS in public drinking water, which would require water utilities to filter out certain PFAS that have contaminated water supplies.

The EPA is proposing limiting two chemicals of PFAS found in drinking water—PFOA and PFOS. The agency would set a limit for PFOA and PFOS of **4 parts per trillion** each in public drinking-water systems. The agency also said it would regulate four other PFAS chemicals by requiring treatment if the combined level reaches a certain concentration.



Nearly everyone in the U.S. is believed to have some level of PFAS in their blood, according to the Centers for Disease Control and Prevention.

The move represents a seismic shift in the [regulation of the nation's drinking water](#), and will require sweeping changes for thousands of water systems that will have to test for and treat a group of chemicals that have been the subject of growing concern among public health officials.

Centre County 2022 Streams Report - Gary Moorman

Stream water quality in Centre County is generally good

The Centre County Gazette published Gary's report, **CCPaSEC give stream report**, in their March 30 issue. We are pleased to report at this time that all the characteristics of the water at all of our sampled streams are stable, with no major changes. The Marcellus shale & non-Marcellus streams are in good condition and support a wide variety of aquatic insect life. In recent years, low stream flows combined with high water temperatures have been major factors in the temporary decline in the health of some streams, but even the smallest streams rebound to good health when water levels return to normal. The amounts of nitrates, phosphates, and sulfates fluctuate but, in general, continue to be low. In all cases, chemical levels are well below drinking water standards, though that does not mean it is safe to drink directly from any of the streams.

As a general trend in some streams, we are noting that the water pH is trending very slightly downward (becoming very slightly more acidic). Whether this trend continues and whether the result is good or bad remains to be seen. We also sample the aquatic insect (mayflies, caddisflies, stoneflies, riffle beetles, sowbugs, etc.) and other invertebrate (crawfish, worms, leeches, snails, and others) populations twice yearly at each site. The downward trend in water pH may eventually have an effect on the diversity of these populations.

Currently, the quality of water found in Centre County seems to be stable and generally good in terms of the parameters measured by Centre County PA Senior Environmental Corps volunteers. But we do not regularly measure all chemicals that could be in water nor do we, as a group, keep track of all the development and other activities at locations well away from our sampling sites that could negatively impact water quality. We have assisted other groups in testing for chemicals such as the herbicide atrazine (and did not find any in our streams). In 2022, one of our teams partnered with Sierra Club Moshannon Group to collect surface water samples from Spring Creek and Bald Eagle Creek for per- and poly-fluoro alkyl substances (PFAS). All residents of Centre County should think about what they do each day that may affect water quality and also consider how continued development in Centre County may influence our water resources and those of everyone downstream from Centre County.

Gary has a presentation lined up for April for the **Retired PSU Association** and he and Susan are attending the **Clinton Dubois County 4-H Fair April 22** to help encourage them to start a similar group in Clinton, for the May 18, **Central Pa Association Retired State Employees** on May 18.

Slab Cabin Run - Carolyn

Carolyn reported that extensive data has been collected on Slab Cabin Run and there is an effort to classify the stream as a Class a Wild Trout Stream. Carolyn proposed that CCPaSEC support this effort. A vote will be taken in March after members have an opportunity to review the information.

A draft report is available for review on the DEP eComment website at www.ahs.dep.pa.gov/eComment.



Newsletter March 2023

Slab Cabin was first identified as an impaired stream in 2001. Efforts to restore portions of the stream have played into a larger strategy of revamping PA waterways to send less polluted runoff downstream to the Chesapeake Bay. In 2013, the Pennsylvania Fish and Boat Commission found enough wild trout in Slab Cabin Run to classify it as a Class A wild trout stream and recommend it for further conservation safeguards from the PA Department of Environmental Protection.

Other environmental news:

Rare earth elements: Appalachia's coal country, researchers envision turning toxic waste into treasure. The pollution left behind by abandoned mines is an untapped source of rare earth elements.

Rare earths are a valuable set of 17 elements needed to make everything from smartphones and electric vehicles to fluorescent bulbs and lasers. With global demand skyrocketing and China having a near-monopoly on rare earth production - the United States has only one active mine - there's a lot of interest in finding alternative sources, such as ramping up recycling. Pulling rare earths from coal waste offers a two-for-one deal: By retrieving the metals, you also help clean up the pollution. Currently, a pilot project in West Virginia is taking material recovered from an acid mine drainage treatment site and extracting and concentrating the rare earths.

<https://www.sciencenews.org/article/coal-waste-rare-earth-elements-recycling>

A federal judge in North Dakota on Wednesday temporarily blocked implementation of a rule establishing protections for seasonal streams and wetlands in 24 states, according to court documents.

[Reuters](#)

[U.S. judge blocks Biden clean water rule in 24 states](#)

A federal judge in North Dakota on Wednesday temporarily blocked implementation of a rule establishing protections for seasonal streams and wetlands in 24 states, according to court documents.

U.S. District Court Judge Daniel Hovland granted the states' request for a preliminary injunction prohibiting enforcement of the Environmental Protection Agency's Waters of the United States rule, which was finalized in December. In the order, Hovland said the states would "expend unrecoverable resources complying with a rule unlikely to withstand judicial scrutiny."

The preliminary injunction affects Alabama, Alaska, Arkansas, Florida, Georgia, Indiana, Iowa, Kansas, Louisiana, Mississippi, Missouri, Montana, Nebraska, New Hampshire, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, and Wyoming. An injunction was Texas and Idaho.



On 4/11/2023, the [Environmental Quality Board \(EQB\)](#) took the action noted on the following final regulation:

Final Rulemaking: Radiological Health Fees (#7-574) – Adopted

On 4/11/2023, the [Environmental Quality Board \(EQB\)](#) took the action noted on the following final regulation:

Final Rulemaking: Water Quality Standards - Dunbar Creek et al. Stream Redesignations (#7-557) – Adopted

On 4/11/2023, the [Environmental Quality Board \(EQB\)](#) took the action noted on the following final regulation:

Final Rulemaking: Noncoal Mining Clarifications and Corrections (#7-554) - Adopted

We will be notified whenever final regulations are submitted to the [House Environmental Resources and Energy Committee](#), the [Senate Environmental Resources and Energy Committee](#), and the [Independent Regulatory Review Commission \(IRRC\)](#).

CCPaSEC Stream Problem Reporting Protocol

[Microsoft Word - CCPaSEC stream problem reporting protocol 7 2019.docx](#)

Observations significantly different from those noted below and are significantly different from previously observations, are to be reported to the President of CCPaSEC or the President's designee to determine any need for further action.

Once the anomaly is confirmed (see below), the President or the designee may report it to the Centre County Conservation District Water Specialist).

The Centre County Conservation District Watershed Specialist may investigate the reported change to the stream and/or forward the report to the PA Department of Environmental Protection. CCPaSEC may be asked to take additional samples or document its observations following a protocol specific to the case. CCPaSEC volunteers will cooperate with these agencies to the extent possible.

The following should be considered abnormal if they are significantly different from the average of several previous measurements.

- ✓ **Nitrates higher than 10 mg/L** (= 10 ppm) (The colorimeter test is accurate from 0 to 30 mg/L.)
- ✓ **Phosphates higher than the amount that can be measured by the colorimeter (= 2.5 ppm)** (The colorimeter test is accurate from 0 to 2.5 mg/L.)
- ✓ **Sulfates higher than the amount that can be measured by the colorimeter (70 mg/L).** (The colorimeter test is accurate from is 0 to 70 mg/L.)
- ✓ **Specific Conductivity higher than 500 micro-siemens per centimeter ($\mu\text{S}/\text{cm}$).** According to the PaSEC field manual, studies of inland fresh-water streams that support good mixed fisheries range from 150 to 500 $\mu\text{S}/\text{cm}$. (The conductivity meter test is accurate for readings between 100 and 19,900 $\mu\text{S}/\text{cm}$.)
- ✓ **Macroinvertebrate Survey** If the diversity (variety of organisms found at a site) is significantly lower than was the case at a majority of previous samplings and this difference has no simple explanation, contact the Macroinvertebrate Collection Chair

Please see the Problem Report form on page 11

Babesiosis Malaria-like parasitic disease

Babesiosis is most frequently reported from the Northeastern states, New York reported 663 in 2019 and may be a risk in Pennsylvania*, ***Pennsylvania is not listed in the report as the state doesn't report cases to the CDC.*** Lyme Isn't the Only Tick Disease to Worry About. An infection of the red blood cells, that is caused by a parasite called Babesia caused by the bite of a blacklegged tick or deer tick. It may present with high fever, chills, joint pain and headache. Babesiosis is caused by a parasite that is picked up by ticks and transmitted to humans.

While some people have no symptoms after contracting babesiosis, the most common symptoms include fever and muscle and joint pain. It can be fatal if people with compromised immune systems or previous kidney or liver disease contract it.

They are most likely to bite during the spring, summer and fall, though adult ticks may still bite during the *winter if temperatures are above freezing.*, the disease can be prevented by limiting tick exposure.

The same prevention methods of Lyme, including wearing repellent, long sleeves and doing regular tick checks, are also effective methods for preventing Babesiosis. While there is no vaccine available, Babesiosis can be treated using antibiotics such as azithromycin and atovaquone.

<https://www.usatoday.com/staff/2647436001/janet-loehrke/> * [Tick-Borne Babesiosis On The Rise: What To Know In Pennsylvania | Across Pennsylvania, PA Patch](#)

Equipment Supplies Report - Dan DeLotto

The ad hoc committee on kit equipment for the future decided that it was best to maintain the equipment we have until it fails; and then repair or replace it. We investigated adding or deleting tests, and came to the conclusion that we are testing an appropriate set of parameters given our capabilities.

Our **Flowatch** flow meter model FW-450 is still being sold, so they can be purchased for between \$500-\$600. We have a new spare in stock.

Our **Hach Colorimeter** series DR-850 and 890 are no longer sold, but the DR-900 is a suitable replacement at \$1000-\$1200 and is currently being sold. Bill Smith, QC Team, has a DR-900 and we have another in stock.

Our **pH/EC multiparameter Oakton PCTSTestr-35 meters** are no longer sold, but we have replacement probes in stock, along with what will be the Testr-35's replacement.

Our **YSI model 550a DO meter** is no longer sold. But we have some replacement parts. We have 5 replacement probe tips, a spare meter with a bad circuit board, and a spare LCD display. YSI donated the unused display to us. Gary Moorman found an interesting pen type DO meter made by Sper Scientific. It's called their Dissolved Oxygen Pen for \$322.

These are the conclusions of our committee. Thanks to Rob Fugate, Gary Moorman, Fred Gildow, Ken Johnson, Dave Roberts, and Jan Hoffmaster for their participation. " - Dan

Activities & Events

At home activity:

- ✓ **Conserve Water usage at Home:** Before you can conserve water, you need to know how much you're using. Check your water bill usage and set a goal. Water conservation should begin with the low-hanging fruit.
 - **Look at Landscaping:** Grass is a thirsty plant. Water grass and flower beds early in the morning when evaporation will be minimal and set up a rain gauge to know when watering is necessary. After watering, watch for runoff. Wastewater flowing off the lawn and into storm drains is wasteful and is overwatering.
 - **Buy Low-Flow:** When it's time to replace a faucet or toilet, take water conservation into account. Motion-activated faucets, these faucets feature one-touch activation or sensor in the front, to receive hand-wave to turn on or off. Some models also contain an LED indicator that's easily viewable from a distance, telling you the current water temperature, with blue for cold, red for hot, and an array of colors in-between.
 - **Rainwater harvesting systems:** The rain that falls on your home is another potential water source. collect the runoff from your roof during rainstorms. Collected rainwater can be added to your greywater system for landscaping irrigation and other non-potable uses.
Watch the *ClearWater Conservancy* for deals on rain barrels and collection systems.
- ✓ **Review our data:** Team members can help by reviewing their data on our website. Fill in missing information, look for misplaced decimals, correct dates and incorrect entries. It's a good time too, to look at the accompanied charts to see how streams have changed over time.
- ✓ **Our newsletter:** Is important notification to public and county officials recognition of our member's efforts and current topics about our local environment. Copies are sent to our county officials, newspapers, and appear on some websites\Facebook.

We need your help. We are asking you to help us report on your experiences, opinions, reasons for joining. Could you take a few moments to write an article? It needn't be long – just a paragraph or so. Action photos of volunteers are especially welcome, showing volunteers collecting and cataloging macros or in the stream performing the flow measurements.

Please contact us thru our CCPaSEC website CCPaSEC; Gary Moorman or Ken Johnson – we'd be happy to help.

Events:

- ✓ **Saturday, April 22 - 8 am – noon 2023 Watershed Cleanup Day**
please Contact Genie Robine to volunteer.

continued

- ✓ **Sunday, May 21, 2023, Outdoor Adventure Expo 2023** from 12 pm to 5 pm. The Outdoor Adventure Expo highlights Bellefonte's beautiful and easily accessible natural assets while showcasing regional vendors, nonprofits, and businesses that specialize in outdoor and recreation-related products. This is a free-admission, regional event to promote nature-based tourism and commerce. This event also serves as a fundraiser for Downtown Bellefonte, Inc. to aid in its economic development initiatives.
- ✓ **Second Wednesday of the month.** CCPaSEC meetings are held at the Willowbank Building, Room 245 at 9:30 AM, Bellefonte, as well as online. [Meeting Schedule \(ccpasec.org\)](http://MeetingSchedule(ccpasec.org))
- ✓ **Third Wednesday of every other month.** Meetings of the **Spring Creek Watershed Commission** are held on the Location: Borough of Bellefonte 236 West Lamb Street
- ✓ **ClearWater Conservancy Events**
It's always the right reason to connect with friends, so ClearWater Conservancy hosts a variety of events all year long.
<https://www.clearwaterconservancy.org/events>
- ✓ **April 20,** we are scheduled to 'man' a table at a volunteer fair in Clinton County to assist Mike Vail (AmeriCorp Senior Volunteer Program manager) in establishing a water testing group similar to CCPaSEC
- ✓ **May 18,** we are scheduled to give a presentation at the monthly meeting of the Nittany Chapter of PARSE (PA Association Retired State Employees), detailing how CCPaSEC activities benefit the environment.

Videos of interest:



[Moshannon Group | Sierra Club](#) The Sierra Club Moshannon Group serves eleven counties in Pennsylvania: Bedford, Blair, Cameron, Center, Clearfield, Elk, Huntington, Jefferson, Juniata, McKean and Mifflin Counties.



<https://paenvironmentdaily.blogspot.com/>
<https://www.facebook.com/PaEnvironmentDigest/>

- ✓ **April 13-- Virtual.** [WeConservePA, Partners Host Webinar On Indigenous Peoples In Pennsylvania History. 1:00 to 2:00 p.m.](#)
- ✓ **May 3-- Virtual.** [Beaver County Marcellus Awareness Community Monthly Eyes On Shell Meeting. 7:30 p.m.](#)
- ✓ **June 7-- Virtual.** [Beaver County Marcellus Awareness Community Monthly Eyes On Shell Meeting. 7:30 p.m.](#)



First Investigation of Stream Health (FISH) Protocol Do you enjoy outdoor activities? Become a community scientist. First Investigation of Stream Health (FISH) monitors changes to local streams and their habitats. The first step is to complete our short form to become an official FISH user.

Then, you can participate in FISH using the FISH mobile app on your smartphone. No smartphone? You can also print the FISH protocol and report your data on the FISH website.

FISH Mobile Apps (Apple) (Android)

Printable FISH Protocol and FISH Website Reporting Tool

[First Investigation of Stream Health \(FISH\) Protocol \(psu.edu\)](https://psu.edu)

Handy reference

Common Reptiles & Amphibians of Pennsylvania

[common-reptiles-amphibians-of-pennsylvania.pdf](https://psu.edu)

Membership

We are not soliciting new membership currently.

All our field teams are fully staffed.

We may be seeking help for non-field related support for help with document reviews and clerical functions.

You must be a member of the Centre County RSVP or the Centre County ClearWater Conservancy to join the Centre County Senior Environmental Corps. As members you will be covered by accidental insurance while serving on volunteer activities.

Please be aware that due to our relationship with the RSVP and the ClearWater Conservancy we agreed to obtain their prior approval for any news articles, pamphlets, or to solicit funds or prepare grants, on behalf of our PaSEC organization". See our policies and procedures.

"We cannot direct the wind, but we can adjust the sails." ~Dolly Parton



PROBLEM REPORT FORM

Please notify our CCPaSEC president or vice President with this information who will determine if we need to inform the *Centre County Conservation Commission* if further action is needed.

(You may wish to copy and attach this form with your email message).

| REPORT DATE | TEAM NAME | PREPARED BY |
|-------------|-----------|-------------|
| Date | name | Name |

STATUS SUMMARY

Problem Description - Please be as specific as possible and include the name of the site, stream name, photos, road names and other information that you think would be helpful.

Do you know or suspect who may be responsible?

Yes No

Responsible Party _____

Observation: (all reports are confidential)

Our newsletter is published quarterly.

You can find it on Facebook at the Centre County RSVP and the ClearWater Conservatory.

Your feedback and submissions are welcome. To contribute an article, suggestions or corrections please contact Gary Moorman or Ken Johnson thru our website. CCPaSEC.org

CCPaSEC is Supported by the Following Organizations ClearWater Conservancy, the RSVP of Centre County, PA and the Centre County Conservation District are the primary sponsors for CCPaSEC and provide additional *support and our many individual contributors through Centre Gives*. *Centre County RSVP is supported in part by the [Corporation for National & Community Service](#) and by the [Centre County Board of Commissioners](#) through the [Office of Aging](#)*. Providing additional funding for special equipment: Western Pennsylvania Conservancy: This grant program was administered by the Western Pennsylvania Conservancy in commitment to its core mission of conserving Pennsylvania's diverse ecosystems through science-based strategy, leadership, and collaboration.