

# Share Your Thoughts

## Brown vs. Blue Exhibition Softball Game, Fisher Cats Game

*By Kevin M. Garvey, PE, Wright-Pierce and Sam Currier, Town of Hopkinton & Contoocook Village Precinct*



On the 50th anniversary year of the Clean Water Act's passage, the NHWPCA and New Hampshire Water Works Association (NHWWA) are gearing up for a fun filled double-header on Saturday August 13, 2022!

Batting first will be a softball exhibition game featuring the NHWPCA (Brown) team against the NHWWA (Blue) team. The game is scheduled for 2PM, Saturday, August 13, 2022, at Wolfe Park in Manchester, New Hampshire. At this time, both teams are looking for softball enthusiasts who would like to represent their respective association and participate in the game. Brown or blue team shirts will be provided by the associations and will feature sponsor names on the back. The associations are also looking for interested sponsors for this event. All sponsorships received before May 13th will have their logo printed on the back of the "Brown vs. Blue" T-shirts. Sponsorship will remain open until the event and will be advertised on social media and at the events. Please see the sponsor level options and registration options at the below links. Please reach out to the respective association coordinator with interest to be a team member or a sponsor:

NHWPCA: Kevin Garvey: 603-570-7102, [kevin.garvey@wright-pierce.com](mailto:kevin.garvey@wright-pierce.com)

NHWW: Sam Currier: 603-746-8261, [watersewer@hopkinton-nh.gov](mailto:watersewer@hopkinton-nh.gov)

On deck will be a joint NHWPCA-NHWWA Fisher Cats Outing at Northeast Delta Dental Stadium on Saturday August 13, 2022, around 7:00 PM. This has been a successful event for NHWWA in the past and this year's goal is to have approximately 100-175 attendees between the two associations. Ahead of the game, food will be provided with a BBQ buffet or game day burger and dogs, along with a cash bar.

If you are interested in sponsoring this event please submit your donation on NHWWA's website here:

<https://nhwwa.org/sponsorship/>

If you are interested in attending this event please register on NHWWA's website here:

<https://nhwwa.org/events/fisher-cats-outing-2/>

Be on the look-out for registration for the "Brown vs. Blue" Softball Friendly and Fisher Cats Outing opening soon! And thank you for your continued support!

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**Editor's Words**



Stephanie Somersworth WWTF

Since this year marks the 50th anniversary of the Clean Water Act, I want to write a few words about somebody I know who is turning 50 years old. A brother of one of my best friends is celebrating this milestone birthday. Dan was a typical annoying brother when we were teenagers. He has grown up to be an intelligent, creative, kind, and caring man. Oh, and he's an engineer. We all know that operators and engineers are like cats and dogs! One day pre-pandemic, a bunch of us were wandering around in Boston and I put him on the spot by saying "let the engineer figure it out for us", and he came back with "I hate having to deal with you people".

We can all recite Clean Water Act success stories. When I look at who the heroes of these stories are, I find that both operators and engineers have played integral parts in cleaning up our environment. I know that there are many other people in many other jobs who have also helped, but I just want to take a moment to focus on how two groups that don't always get along have worked together as part of the great American success story that is the Clean Water Act.

In my last Editor's Words, I talked about my plan to take my Girl Scout cookie volunteers to the BRGR Bar in Portsmouth. Well, in typical 2022 fashion, cookie delivery day had a trucking snafu and was delayed by two weeks. One of my friends (who happens to be six feet tall which is REALLY helpful when dealing with pallets of cookies!) was not able to get the new date off from work. So, we went to the BRGR Bar anyway on the original date. The veggie burger there got decent marks for flavor, but not for texture... Two weeks later when we unloaded cookies, I treated my volunteers to pizza at Old Rail in Somersworth.

This is a great time to top off your favorite beverage and enjoy all the great content in this edition of The Collector. As always, please seek out me or one of the other newsletter committee members via phone, email, or in person at one of the awesome upcoming summer events and SHARE YOUR THOUGHTS!



**Upcoming Events**

Go to [www.nhwPCA.org](http://www.nhwPCA.org) for live links to online registration

- **June 24**, 10 AM - 3 PM - **NHWPCA Summer Meeting**, at Ellacoya State Park, Gilford, NH
- **August 4** - NHWPCA Golf Tournament
- **August 13** - **Brown Vs. Blue Exhibition Softball & Fisher Cats Games**, Manchester, NH
- **September 23** - NHWPCA Fall Meeting
- **December 9** - NHWPCA Winter Meeting

**NEWSLETTER COMMITTEE**

Stephanie Rochefort, Mary Jane Meier, Steve Clifton, Rick Nash, Ryan Peebles, **YOUR NAME HERE.**  
We welcome additional members.

We are looking for meaningful articles for the Wastewater Operator in a timely fashion. Send submission articles for *THE COLLECTOR* to: Stephanie Rochefort via email at [srochefort@somersworth.com](mailto:srochefort@somersworth.com).

Editor: Stephanie Rochefort

*THE COLLECTOR* is the Official Newsletter of the NHWPCA

For more information about the NHWPCA visit our website at [www.nhwPCA.org](http://www.nhwPCA.org)

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# Blurbs, Blurbs, & More Blurbs

## 2022 DC Fly-in

Shelagh Connelly (RMI) and Evan Karsberg (NEIWPCC) attended the 2022 DC Fly-in. Stay tuned for an article in the next edition of *The Collector*!



regarding these projects and the money would be available July 1st.

The next bill we have been actively supporting is HB1134. This bill looks to set up a commission to look into and help quantify the impact non-flushable wipes have on treatment plants and collection systems. This bill is the culmination of a lot of work put in by Ray Gordon over many years. We are hoping this is the first set in curbing the problems these wipes cause. On a side note, there is a bill going through congress down in DC that will require labeling of non-flushable wipes. These bills are all a part of the public outreach need to reduce the damage done by these wipes to the systems.

Two related bills that the NHPWA was supporting behind the scenes were HB536 and SB325. Together these bills would provide Public Works workers with death benefits and recognize them as "Essential Workers". The NHPWA was the moving force behind these bills. They have both cleared the House and Senate and are awaiting the governor's signature.

Finally, there were many bills relating to PFAS. Notably HB1547 which requires the state to establish contaminate levels in soil. This bill passed the house and passed the senate with an amendment for an additional \$25M to help with the cost of implementing any rules. Anthony Drouin and his group at DES are working hard to ensure that New Hampshire does not follow Maine's path, but follows a prudent policy while protecting public health.

## The News From Concord

This has been another busy season for the Government Affairs committee. This session is winding down with some successes for wastewater.

First on the list is HB398, signed by the governor on 4/18. This bill is a holdover from 2021 that restores \$5.7M for 2022 and \$6.9M for 2023 striped out of the DES budget to cover State Aid Grants. Representative Tom Bucco deserves our thanks for keeping this bill alive. If your community was on the priority list, you will need to fill out an application. Tracy Wood indicated there would be an announcement from DES

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## Announcements



## NH Water & Wastewater Managers School

### Class of 2023 Program Announcement

The NH Department of Environmental Services (NHDES), the NH Water Pollution Control Association (NHWPCCA) and the NH Waterworks Association (NHWWA) are pleased to announce the next session of the NH Water & Wastewater Managers School, for 2023. Application to the program is open to drinking water & wastewater professionals preparing for future management or supervisory positions, as well as current managers and supervisors who wish to improve their management skills. Course topics include municipal and utilities legal concepts, budgeting, personnel management/human resources, public speaking skills, education and outreach, public information and messaging, and instruction by current NH water and wastewater utility managers. For more information please contact Wade Pelham, NHDES, at [wade.pelham@des.nh.gov](mailto:wade.pelham@des.nh.gov), or visit the NHWPCCA ([www.nhwppca.org](http://www.nhwppca.org)) or NHWWA websites ([www.nhwwa.org](http://www.nhwwa.org)). There is no cost to apply. Tuition for individuals accepted into the 2023 NH W&WWMS program is \$675. Scholarships may be available through the NHWPCCA and NHWWA, please contact Jeremy Bouvier, NHWPCCA at [jbouvier@manchesternh.gov](mailto:jbouvier@manchesternh.gov) or NHWWA at [info@nhwwa.org](mailto:info@nhwwa.org) to learn more about potential scholarship opportunities.



*Thanks to the NH Water & Wastewater Managers School I learned the skills needed to be the kind of manager that I would want to work for. I highly recommend that anyone interested in a management position enroll. I enjoyed all the training and use*

*what I learned almost every day. You can't put a price on the knowledge and networking that occurred during the whole course.*

Nate Brown

Utilities Superintendent, Town of Peterborough  
NH W&WW Managers School Class of 2011



## Operator Profile

### Peter Conroy

Peter Conroy is the Chief Plant Operator for the Portsmouth, NH Peirce Island WWTF. He is a Grade 4 certified NH Wastewater Treatment Operator.



### Please tell us about your plant

Peirce Island is a 6.3 MGD (design flow) plant in Portsmouth, NH, the only Biologically Active Filter plant in the state of New Hampshire. At the plant headworks, flow enters via two 3' wide channels, each designed to accommodate 11 MGD, with mechanically cleaned 6 mm bar screens. The headworks building is equipped with a carbon odor control system, which includes a 9' diameter adsorber rated at 7,500 cfm. Flow continues to the grit building with two, 23,000 gallon grit chambers aerated by 150 cfm blowers, prior to moving to two 400,000 gallon primary clarifiers. Primary clarifier effluent is pumped to the biologically aerated filters (BAF). Clarifier solids are pumped to aerated sludge tanks in the solids building where three screw presses provide dewatering. Dewatered material is landfilled. In the BAF, 12 cells containing polystyrene media beads are configured in 2 stages, 6 per stage. The first 6 cells comprise the nitrification stage where oxygen demand is removed and ammonia is converted to nitrate. Aeration occurs at the beginning of stage 1 to support this process. Effluent from the stage 1 cells flows from the nitrification effluent channel to the stage 2 cells. Prior to entering the stage 2 cells, metering pumps introduce a carbon source to the flow

to aid in the stage 2 denitrification process. The stage 2 cells are not aerated, promoting denitrification through an anaerobic process, converting the nitrate and releasing nitrogen gas to the atmosphere. Treated effluent from the stage 2 cells flows to two, 62,000 gallon chlorine contact tanks for disinfection. Disinfected plant effluent is released into the Piscataqua River via a single 24" diameter outfall.



### What was your first ever job?

My first ever job was as a dishwasher at an all-boys camp.

### How long have you been in the clean water/wastewater profession?

I have been in the wastewater field for just over 10 years. My wastewater career began at the City of San Francisco Oceanside Plant.

### What is your favorite part about being a wastewater operator?

My favorite part of being a wastewater operator is that we are a part of helping preserve the environment for future generations.

### What have you learned that you wished you knew when you first started in the industry?

I wish I had known that this profession is just as much about people as it is equipment when I first started as an operator.

### What advice do you have for new operators?

My advice for new operators is to never stop gaining experience, certifications, or education. There will never come a time when you don't get a position because you have too much.



## Safety Corner

### We All Love Summer, But Let's Be Safe

*By Patty Chesebrough, NHWPCA Safety Committee*

Summer brings a lot of fun activities, but it also brings some workplace hazards. The Safety Committee reminds you to be aware of a few common summertime hazards.

**Heat.** Summer brings hot temperatures and stronger/longer sun exposure. Working in these conditions can be dangerous. CDC tips for staying safe in the heat:

*Wear Appropriate Clothing:* Choose lightweight, light-colored, loose-fitting clothing. If the type of work prevents this, be sure to take more frequent rest and hydration breaks.

*Schedule Outdoor Activities:* Try to limit your outdoor activity to when it's coolest, like morning and evening hours. Rest often in shady areas so that your body has a chance to recover.

*Pace Yourself:* Slow down when working in the heat. If exertion in the heat makes your heart pound and leaves you gasping for breath, STOP.

*Protect Yourself from the Sun:* Wear a wide-brimmed hat, sunglasses, and by put on sunscreen of SPF 15 or higher 30 minutes prior to going out. Don't forget to reapply.

*Stay Hydrated:* Drink more fluids, regardless of how active you are. Don't wait until you're thirsty to drink. Stay away from very sugary, very cold, or alcoholic drink.

*Replace Salt and Minerals:* Heavy sweating removes salt and minerals from the body that need to be replaced. A sports drink can replace the salt and minerals you lose in sweat.

*Watch Out for Those Around You:* Know and recognize the symptoms of heat-related illnesses and what you need to do to help (see figure to right).

## HEAT-RELATED ILLNESSES

WHAT TO LOOK FOR	WHAT TO DO
<b>HEAT STROKE</b>	
<ul style="list-style-type: none"> <li>• High body temperature (103°F or higher)</li> <li>• Hot, red, dry, or damp skin</li> <li>• Fast, strong pulse</li> <li>• Headache</li> <li>• Dizziness</li> <li>• Nausea</li> <li>• Confusion</li> <li>• Losing consciousness (passing out)</li> </ul>	<ul style="list-style-type: none"> <li>• Call 911 right away-heat stroke is a medical emergency</li> <li>• Move the person to a cooler place</li> <li>• Help lower the person's temperature with cool cloths or a cool bath</li> <li>• Do not give the person anything to drink</li> </ul>
<b>HEAT EXHAUSTION</b>	
<ul style="list-style-type: none"> <li>• Heavy sweating</li> <li>• Cold, pale, and clammy skin</li> <li>• Fast, weak pulse</li> <li>• Nausea or vomiting</li> <li>• Muscle cramps</li> <li>• Tiredness or weakness</li> <li>• Dizziness</li> <li>• Headache</li> <li>• Fainting (passing out)</li> </ul>	<ul style="list-style-type: none"> <li>• Move to a cool place</li> <li>• Loosen your clothes</li> <li>• Put cool, wet cloths on your body or take a cool bath</li> <li>• Sip water</li> </ul> <p><b>Get medical help right away if:</b></p> <ul style="list-style-type: none"> <li>• You are throwing up</li> <li>• Your symptoms get worse</li> <li>• Your symptoms last longer than 1 hour</li> </ul>
<b>HEAT CRAMPS</b>	
<ul style="list-style-type: none"> <li>• Heavy sweating during intense exercise</li> <li>• Muscle pain or spasms</li> </ul>	<ul style="list-style-type: none"> <li>• Stop physical activity and move to a cool place</li> <li>• Drink water or a sports drink</li> <li>• Wait for cramps to go away before you do any more physical activity</li> </ul> <p><b>Get medical help right away if:</b></p> <ul style="list-style-type: none"> <li>• Cramps last longer than 1 hour</li> <li>• You're on a low-sodium diet</li> <li>• You have heart problems</li> </ul>
<b>SUNBURN</b>	
<ul style="list-style-type: none"> <li>• Painful, red, and warm skin</li> <li>• Blisters on the skin</li> </ul>	<ul style="list-style-type: none"> <li>• Stay out of the sun until your sunburn heals</li> <li>• Put cool cloths on sunburned areas or take a cool bath</li> <li>• Put moisturizing lotion on sunburned areas</li> <li>• Do not break blisters</li> </ul>
<b>HEAT RASH</b>	
<ul style="list-style-type: none"> <li>• Red clusters of small blisters that look like pimples on the skin (usually on the neck, chest, groin, or in elbow creases)</li> </ul>	<ul style="list-style-type: none"> <li>• Stay in a cool, dry place</li> <li>• Keep the rash dry</li> <li>• Use powder (like baby powder) to soothe the rash</li> </ul>

[CDC.com](https://www.cdc.gov)

to the skin as you can. Pull upward with steady, even pressure. Don't twist or jerk the tick. After removing the tick, clean the bite area and your hands with rubbing alcohol or soap and water. Watch for symptoms for 30 days.

### Blacklegged "Deer" Ticks

**QUICK STATS:**

- Color:**  
Orange-brown with dark legs
- Shape:**  
Flat, broad oval
- Size:**  
1/4 inch long
- Region:**  
Found primarily in the northeastern, mid-Atlantic, southeastern and north central regions of the U.S.

[PestWorld.com](https://www.pestworld.com)

**Ticks.** Ticks can transmit infections, including Rocky Mountain Spotted Fever and Lyme disease, now the most common vector-borne disease in the U.S. At first, Lyme disease usually causes symptoms such as a rash, fever, headache, and fatigue, but if left untreated, the infection can spread to the joints, heart, and the nervous system.

The best prevention for tick bites and associated diseases is knowing that ticks live in grassy, brushy, or wooded areas, and taking appropriate precautions when in these areas. Use EPA-registered insect repellents containing DEET or treat clothing/gear with products containing permethrin. Check for ticks on your body after being outdoors.

If you find biting tick, remove it immediately. Use fine-tipped tweezers to grasp the tick as close

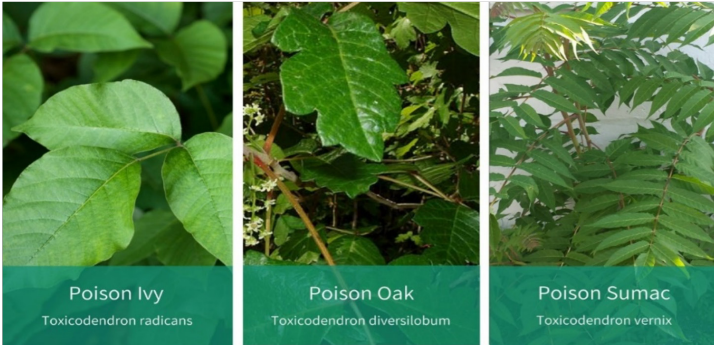
**Bees, Wasps & Hornets.** Summer brings a whole host of insects, but most are a nuisance rather than a hazard. Bees, wasps, and hornets, however, can cause severe allergic reactions requiring immediate medical attention. Those with allergies should carry an epinephrine autoinjector ("epi pen").

Since most stings are due to accidental encounters, the best prevention is to minimize nests around the workplace. Remove sources of outdoor food, pick up trash, seal garbage cans, and cover compost piles. Check for nests and large numbers of bees congregating regularly and promptly treat/remove them when found.

**Poisonous Plants.** Although poisonous plants – like poison ivy, oak, and sumac – are present year-round, summer work increases the chance of worker exposure. The best way to avoid exposure is to know what these plants look like so you can simply stay away. Don't forget that the vines and roots are just as poisonous as the leaves, sometimes more, and never burn the plants, as this can cause the poisons to be inhaled.



Beware of "fury" vines!



coryellhealth.org

If you must work around poisonous plants, then prevent direct contact with the skin by wearing long pants/sleeves, boots, and gloves. It's the resin (oil) from the plants that causes the rash, and being transferred to other areas of the body, is critical. Treat clothing, boots, gloves, and tools as "contaminated", removing them as soon as possible, and washing thoroughly with soap and water.

*This article is brought to you by the NHWPCA Safety Committee. We are still seeking Near Miss ideas. If you or someone you have had a Near Miss, please let us by sending the incident to Patty Chesebrough at pchesebrough@neiwpc.org. All submissions are confidential. We just want to keep a Near Miss from becoming an accident. Thank you in advance for your submissions.*

## Pretreatment Tales

*By Stephanie Rochefort, City of Somersworth WWTF*

There's a wonderful online Pretreatment Coordinators Group. People will ask a question and immediately receive plenty of answers.

Recently this was posted:

*"So last Wednesday at noon one of the operators while pulling a sample noticed our influent was this weird aqua color as well as a sheen (there was not a distinct smell anyone noticed). We caught it at the end of it coming into the plant we believe (after inspection it had made it to sand filters) so we think it made it to the plant earlier that morning. Since then, our plant has slowly died and as of today we do not have any bugs.*

*We headed out immediately trying to track it down. We figured out which trunk line it came from but could not identify what business it came from. I stopped at any industry that I thought could have discharged something like that then called all other industries that discharge to that line. But no one is admitting anything.*

*I sent off a sample to get analyzed to see what is in it and should get that back in the next week or so.*

*Does anyone have any ideas or thoughts on where to go next???"*

Some of the answers were:

Pond Algae killer – Notorious for finding its way into sanitary sewers from the resident who overdoes it. Most are Cupric ion based,

Blue road salt - some of the road side stock piles can contain cupric cyanide based formulations. You may be able to find a trace of cyanide in this form of influent.

Cooling tower flush material – this usually happens when they do a cooling tower flush and any parts containing Copper extract along with any Molybdenum additives,

Molybdenum grease – Usually blue in color along with a slight sheen,

Right around this time of the season some companies are performing cooling tower flushes

## Quiz Time!

### Test your knowledge about BNR Process Control & Troubleshooting

From royceu.com

#### 1. Which adjustment will normally improve denitrification in a conventional aeration tank?

- A. Increase the air supply
- B. Increase the D.O.
- C. Decrease the D.O.
- D. Shut off the RAS

#### 2. Which adjustment will normally improve denitrification in a 5-stage Bardenpho process?

- A. Decrease the Internal Recycle rate
- B. Increase the D.O.
- C. Decrease the RAS
- D. Increase the Internal Recycle rate

#### 3. Which group of bacteria are responsible for converting nitrite to nitrate?

- A. Facultative
- B. Nitrosomonas
- C. Nitrobacter
- D. Heterotrophic

#### 4. Given the "Fate of Phosphorus" profile, why does TP reduce through the 1st anoxic zone?

- A. Phosphorus is still being released
- B. CBOD5 uptake through denitrification
- C. Low aerobic conditions create Luxury P Uptake
- D. Nitrification causes TP to be absorbed

#### 5. Which best describes the nitrification cycle?

- A. NO<sub>3</sub> is converted to NH<sub>3</sub>
- B. NH<sub>3</sub> is converted to NO<sub>2</sub> and then to NO<sub>3</sub>
- C. NH<sub>3</sub> is converted to NO<sub>3</sub> and then to NO<sub>2</sub>
- D. NO<sub>2</sub> is converted to NH<sub>3</sub> and then to NO<sub>3</sub>

#### 6. What problems will be experienced with phosphorus removal if D.O. is present in the fermentation zone?

- A. No problems ... P removal will be high
- B. P release will be high but P uptake will be low
- C. P release will be hindered and P uptake will be reduced
- D. The fermentation zone should have high D.O.

#### 7. What adjustment should be considered if ammonia leaving the aerobic zone is too high?

- A. Decreasing the oxygen input, thereby increasing denitrification, will reduce the ammonia levels
- B. Increasing the oxygen input will improve nitrification
- C. Reduce MLSS levels below 1,000 ppm
- D. Increase the internal recycle rate

ANSWERS: 1C, 2A, 3A, 4B, 5B, 6C, 7B

prior to the summer season. Additionally see this with large universities when they're ready to reactivate their cooling towers,

Car wax manufacturing products,

Ink and Color toner manufacturing and usage,

Plumber tracer dyes - sometimes the highly concentrated solid dry pigment material can stick around for a while unlike the liquid form,

Lumber Mills - copper-based chemicals to treat the wood

And the **most** popular answer on the board (say that out loud in a game show announcer's voice) was **Port-o-Potty waste!**

The important lesson here is to have your response tool-kit full when something weird shows up in your influent. Grabbing samples and sending samples out for analysis is an obvious response. So is investigating where in your system the strange color or odor is coming from. But when you get stuck, don't hesitate to reach out and ask for help! We not only have an awesome network of Industrial Pretreatment Coordinators in New Hampshire, we also have online resources to gather ideas from across the country.



## Wow, check out this Proclamation!

*By Stephanie Rochefort, City of Somersworth WWTF*

There was a laboratory professionals week in New Hampshire and laboratory professionals who ensure clean water are listed! I was super-excited to read this news and I headed straight to my favorite coffee shop for my free coffee. There was no free coffee, I guess that they hadn't heard the news. I didn't find any deals on restaurant-meals either. By the end of the week, I was feeling kind of sad that even though it was laboratory professionals week, I hadn't received any perks. I did share the news at my favorite restaurant and got a free beer...

*The State of New Hampshire*  
*By His Excellency*  
*Christopher T. Sununu, Governor*  
*And The Honorable Executive Council*

*A Proclamation*

In the year of our Lord Two Thousand and Twenty-Two

**LABORATORY PROFESSIONALS WEEK**  
**APRIL 24-30, 2022**

*WHEREAS*, critical medical, environmental, and public health decisions often rely on timely and accurate test results; and

*WHEREAS*, laboratory professionals, including pathologists, biologists, chemists, cytotechnologists, medical laboratory technicians, phlebotomists, histologic technicians, laboratory scientists, microbiologists, toxicologists, criminalists, quality and safety managers and laboratory data analysts are highly trained specialists who perform and evaluate laboratory tests to detect and diagnose disease, monitor environmental changes and assist in treatment plans; and

*WHEREAS*, the COVID-19 pandemic further demonstrated the critical role of laboratory professionals during the response to a public health emergency; and

*WHEREAS*, laboratory professionals by their analyses ensure clean water, clean air, safe food and defensible scientific data; and

*WHEREAS*, dedicated laboratory science practitioners maintain the highest standards and continually work to improve the quality of laboratory services; and

*WHEREAS*, the State of New Hampshire commends all laboratory professionals for their significant contributions to the health, wellness and safety of our state;

*NOW, THEREFORE, I, CHRISTOPHER T. SUNUNU, GOVERNOR* of the State of New Hampshire, do hereby proclaim **APRIL 24-30, 2022** as **LABORATORY PROFESSIONALS WEEK** in the State of New Hampshire, and call this to the attention of all citizens.



Given during Executive Council session, this 20<sup>th</sup> day of April, in the year of Our Lord, two thousand twenty-two, and of the independence of the United States of America, two hundred forty-five.

*Christopher T. Sununu*  
Christopher T. Sununu, Governor

*Joseph D. Kenney*  
Councilor Joseph D. Kenney, District 1

*Cinde Warrington*  
Councilor Cinde Warrington, District 2

*Janet Stevens*  
Councilor Janet Stevens, District 3

*Theodore L. Gatsas*  
Councilor Theodore L. Gatsas, District 4

*David K. Wheeler*  
Councilor David K. Wheeler, District 5

# President's Corner

*Robert J. Robinson, P.E.*

The New Hampshire Water Pollution Control Association (NHWPCA) teamed up with the New Hampshire Department of Environmental Services (NHDES) for the Discover Wild NH Day 2022. The event was held on Saturday, April 16th at New Hampshire Fish and Game located at 11 Hazen Drive in Concord.



The Discover Wild NH Day 2022 was the first one since the COVID pandemic put them on hold. The event was very well attended with many families present. The stars of the event were the Conservation Officers and their K9 partners that are featured on North Woods Law.

The NHWPCA and the NHDES provided environmental education. This included how to substitute everyday products that we all dispose of in the trash with products that are reusable. The metal straws that were handed out went very fast. And using tee shirts to make shopping bags was genius. It is nice to see the younger generation being more ecologically friendly. There was also a nice display on “flushable wipes” and why they are not “flushable”. Hopefully we saved some pipes and pumps from getting clogged.



The highlight of our booth was the 20 fishing poles that were raffled off. The crowd of excited children at each drawing was very large. They were thrilled when they won a fishing pole. The theme of the day was Discover Wild NH Day; I would like to think that we helped make that happen. In the future when they go fishing I hope that look back on this day. I know I will.

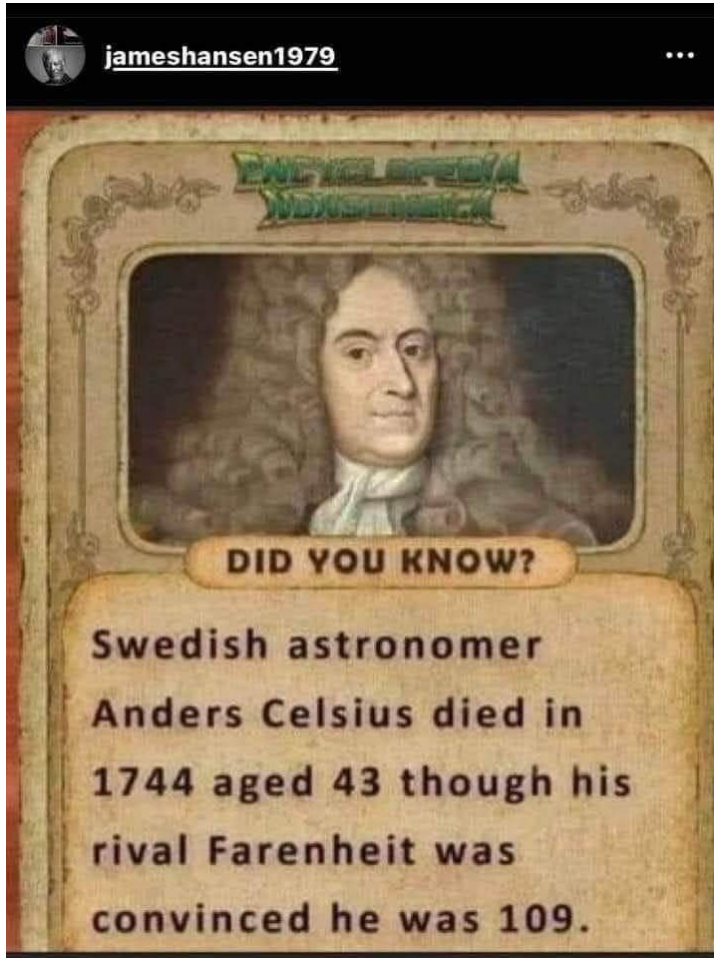


I would like to thank Ray Gordon, Anthony Drouin, Wade Pelham, and the rest of the NHDES staff that were present that day. You truly made this a rewarding experience.





To make you smile...



## NHDES Funding for Cybersecurity Improvements

Jennifer Brady

Cybersecurity has become part of our everyday lives as we navigate routinely changing passwords, two-factor authentication, and even biometric technology. Despite our best efforts, important information can get into the wrong hands. Cyberattacks have become an increasing concern for critical infrastructure, including wastewater and drinking water systems. Unauthorized access to a system could cause disruption of system operations or have customer billing information and other sensitive data including passwords, addresses, critical asset inventory, and vulnerabilities to become stolen or exploited. Water systems should be

proactive in assessing their operations for gaps in cybersecurity (vulnerabilities) and adjust where possible to reduce the risk of an attack.

NHDES is pleased to announce the availability of grant funding made available through the American Rescue Plan Act (ARPA) to assist NH wastewater and drinking water systems implement cybersecurity improvements. Up to \$50,000 of 100% grant funding is available per wastewater or drinking water system and up to \$100,000 is available for a combined system. Eligible systems are municipal wastewater systems regulated with a NPDES permit or Groundwater Discharge Permit and/or Community Public Drinking Water systems serving a minimum of 500 people, excluding privately owned redistribution systems.

An eligibility requirement of this grant program is the completion of an approved cybersecurity assessment within two years of the grant application submittal date. This is a free service available through federal agencies that will check for system vulnerabilities and help water systems make changes to reduce the risk of a cyberattack.

EPA has contracted the services of Horsley Witten Group to facilitate free cybersecurity assessments and technical assistance to drinking water and wastewater systems. Please note EPA's contract is scheduled to end in September 2022. For more information and registration, please visit the EPA Cybersecurity Assessment Flyer.

For any additional questions please contact Gemma Kite, P.E., Senior Environmental Engineer, Horsley Witten Group, Inc., Office: 508-833-6600, Email: [gkite@horsleywitten.com](mailto:gkite@horsleywitten.com)

DHS CISA is available to help drinking water and wastewater systems improve resiliency against cyber threats. CISA cybersecurity assessments are a free resource. If your system is interested in an assessment, please review the information provided at DHS CISA assessments.

For any additional questions and to register please contact Richard F. Rossi, Cybersecurity Advisor – New Hampshire, Cybersecurity and Infrastructure Security Agency, U.S. Department of Homeland Security,

Mobile: 202-770-8991

Email: richard.rossi@cisa.dhs.gov

Applications will be accepted on an ongoing basis until December 31, 2022, or funds are exhausted. For additional information and to apply, please visit Cybersecurity Improvements Assistance – NHDES Infrastructure Funding ([state.nh.us](http://state.nh.us)). Additional resources are also available at NHDES Water System Cybersecurity webpage. If you have any questions on this funding opportunity you can me at [Jennifer.E.Brady@des.nh.gov](mailto:Jennifer.E.Brady@des.nh.gov) or (603)-271-0734.

## Asset Management Article Series – Software Selection

By Eliza J. Styczynski, NHDES WWEB

One of the benefits of developing an asset management program is being able to make data-driven decisions regarding your water related assets. When developing a program, and determining how to maintain such an effort, the vast amount of data needed to do so can easily get overwhelming. To keep up with such a big task, having access to an effective tool (or tools) is vital to store:

- asset inventory,
- asset condition scores, and
- maintenance schedules, as well as
- to provide a platform for identifying the assets in most urgent need of attention.

Asset Management (AM) and Computerized Maintenance Management System (CMMS) software systems are great tools that can assist with data management. As great as these tools can be, they also have the potential of causing issues when staff with specialized training are

lost, or don't share the information. While asset management needs and goals may vary by community, identifying a software package that meets a community's specific needs is vital. Basic asset management in small communities can be conducted with simple spreadsheets and maps. Larger communities may prefer to have a more sophisticated software program developed by a third-party vendor.

First, does your community need an AM/CMMS software? Smaller communities may be unsure whether software could benefit their operation. Take a moment and ask yourself the questions below to aid in the decision on taking the next step to research software.

- What does your current record-keeping look like? Is the data organized or chaotic, with data and materials kept in many different locations? How easily can you locate assets? What data is relevant to those assets?

When record-keeping is unorganized, your team could spend more time searching for relevant information than actually making repairs. Asset management software can store everything in a single, searchable database that allows you to make informed data-driven decisions and find needed information quickly.

- Are routines moving smoothly? Are these routines as efficient as possible? Are needed work tasks communicated clearly and completed on time?

Planning repairs and service in advance can be challenging, so you may currently be in a reactive stage rather than proactive. Asset management software assists with proactively planning these tasks with standardized processes and set procedures. This will aid in reducing reactive repairs and will free up valuable time that can then be used on identified critical tasks.

Depending on how you answered the questions above, evaluating software options further may be worthwhile. Usually, software can be a significant investment, both in time and money. Software is available in a variety of prices with an assortment of capabilities. Before jumping right to scheduling software demos, take some time

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with your team to consider the following before selecting a software:

<b>Know your information and communication needs first</b>
One example would involve Geographic Information System (GIS) – if you want to access information via GIS but don't have that skillset in-house, you might be able to make use of an externally hosted service which could save you money.
<b>Identify existing software programs currently in-house</b>
Do some homework and see what existing software exists within your community and whether they need to be linked to the asset management software. This could range from SCADA to existing GIS and even billing software. Many communities already have one or more GIS licenses in different departments.
<b>Think about staff who will be trained on the software and have access to the system</b>
What will you do if these people leave? Will job descriptions be modified to include asset management tasks and software experience?
<b>The software will need to be maintained</b>
Generate a plan for who will be responsible for the maintenance of the software as updates occur.
<b>Reach out to similar sized communities to see what software they may be using</b>
By gaining an understanding of what is currently used and having a contact to talk about their process will help you narrow in on what may or may not work for your community.

If moving toward purchasing software, the next step would be diving into what capabilities you may require or desire from that software. To get started, check out the questionnaire available in Appendix B of the AM Handbook and Toolkit that is available on the NHDES Asset Management website. Then, have the software companies demonstrate the specific areas requested. Always keep in mind that asset management is not a software program. Software is one more tool used to help communities organize data and help aid in making those data-driven decisions.

Have a lovely summer, and as always feel free to reach out with any questions!

Eliza.J.Morrison@des.nh.gov, 603-271-1989



## Residuals Report

*By Wade Pelham, NHDES*

In our efforts to ensure clean water we encounter many acronyms: EPA; NPDES; NHWPCA; NEBIP. You may recall from one of last year's newsletters that NEBIP stands for Northeast Biosolids Improvement Program. This multifaceted group had been involved in the development of outreach materials to help partners in clean water communicate issues involving PFAS. PFAS are a complex group of substances and very unlike many of the contaminants which clean water groups have previously confronted. Therefore, NEBIP developed two brochures aimed at helping to communicate the unique challenges and impacts PFAS pose. One brochure was developed to educate septage haulers and wastewater operators on the sampling of PFAS at the WWTF, and explain differences between residential and commercial/industrial septage. The other brochure was developed to help wastewater treatment professionals educate septage haulers on these topics. It is anticipated that these brochures will be another useful tool which clean water professionals have available to use for educational purposes on PFAS related issues. The good news is that these outreach materials have been finalized and are now available. Please contact Wade Pelham at [wade.pelham@des.nh.gov](mailto:wade.pelham@des.nh.gov) for information on how to access these NEBIP materials. A big acknowledgement of thanks to all those members of NEBIP who contributed time and effort to the development of these materials, and a big thank you to Keelin Berger, former NHDES Wastewater Engineering Bureau staff member who went above and beyond in her efforts on this project.

## What is Domestic Septage?

Domestic septage is the liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, or a similar system that receives only household, non-commercial and non-industrial wastes.



Household activities include the normal bathroom and kitchen activities done at home by the residents living in that household such as toilet use, residential dish and clothes washing, and showering.

## What is Non-Domestic Septage?

Non-Domestic Septage is also known as commercial or industrial septage. It includes any waste generated by non-household activities that is discharged as wastewater into a septic tank, cesspool, portable toilet, or type III marine sanitation device.



Some examples of Non-Domestic septage:

- A hair salon operating out of someone's home
- An auto mechanic's shop attached to the owner's home
- A school that uses industrial grade cleaning chemicals

*"The factor that differentiates commercial and industrial septage from domestic septage is not the type of establishment generating waste, rather it is the type of waste being produced" (EPA).*



# Wastewater Operator and Septage Hauler PFAS\* Guidance

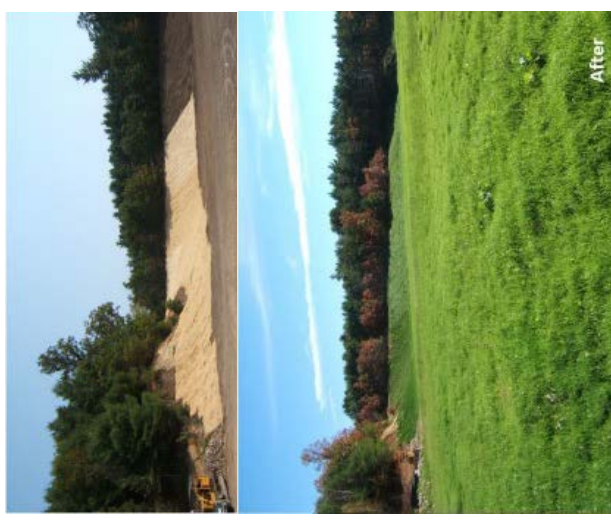
*\*PFAS stands for "Per- and polyfluoroalkyl substances" and is a group of manmade chemicals considered 'contaminants of emerging concern (CECs)'*

Drafted by:

## [The Northeast Biosolids Improvement Program](#)

Including...

- The importance of keeping PFAS out of biosolids
- What is and isn't Domestic Septage?
- What can WWTF professionals do to address these contaminants?



## Document Objective

Dealing with emerging contaminants is a challenge for wastewater disposal facilities, especially if they are producing solids or biosolids for beneficial use / land application.

Because of this, some wastewater treatment facilities are beginning to screen for PFAS and other emerging contaminants. These facilities know that this screening is necessary to ensure they provide a quality fertilizer or soil conditioner to their customers, and to maintain public acceptance of their materials.

This document is to help septage haulers and wastewater operators distinguish the difference between domestic and non-domestic septage, and to help familiarize these haulers and operators with the screening programs that may be in place to monitor for emerging contaminants.

### Useful Links

NEBRA Sampling Guidance:

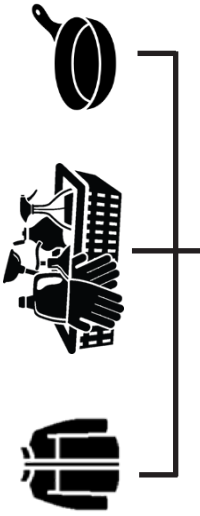
<https://www.nebiosolids.org/pfas-sampling-analysis-guidance>

Merrimack WWTF Septage Permit Application:

[https://www.merrimacknh.gov/sites/g/files/vwhlf3456/f/file/file/septage\\_permit\\_application.pdf](https://www.merrimacknh.gov/sites/g/files/vwhlf3456/f/file/file/septage_permit_application.pdf)

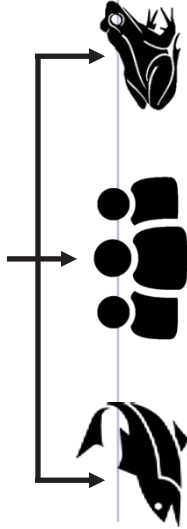
## What is “PFAS” & what does it do?

PFAS stands for “Per- and polyfluoroalkyl substances” and a group of manmade chemicals that have been widely used since the 1940’s.



PFAS is commonly used to make products that are heat, water, or oil resistant and are so useful they are found everywhere within our world!

### BUT... There’s a catch!



PFAS may negatively impact child development, cause reproductive harm, immunological problems, and maybe linked to other health issues.

This is why we need to be careful about buying new products that contain PFAS, and its use in the homestead. This can be very difficult since the chemicals are so popular! The reverse of this pamphlet contains suggestions on what you can do to help!

## Products that may contain PFAS

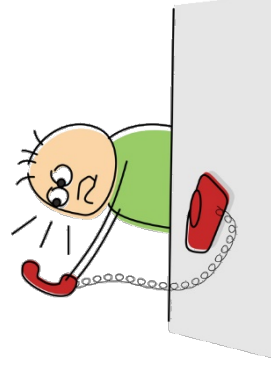
- Outdoor Apparel
- Coated Paper
- Personal Care Products
- Food Packaging
- Cleaning Agents
- Paints / Coatings / Sealants
- Nonstick Cookware



Stain resistant clothing, furnishing, & carpets

## What can I do to help?

1. Read labels and research products to find PFAS-free replacements.
2. Check out [www.pfascentral.org](http://www.pfascentral.org) to help you understand PFAS in your world.
3. Talk to your local legislator or state’s representative and ask for legislative action to better control the manufacturing and use of PFAS in commerce.



## How does PFAS affect your local wastewater treatment facility and YOU?

Drafted by:

### The Northeast Biosolids Improvement Program

*A collaborative workgroup of northeast wastewater professional, state regulators, septage haulers, and wastewater engineers*



Including...

- What is PFAS?
- How PFAS affects wastewater and gets into our environment?
- What can you do to limit PFAS usage at home



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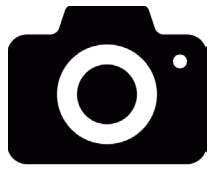
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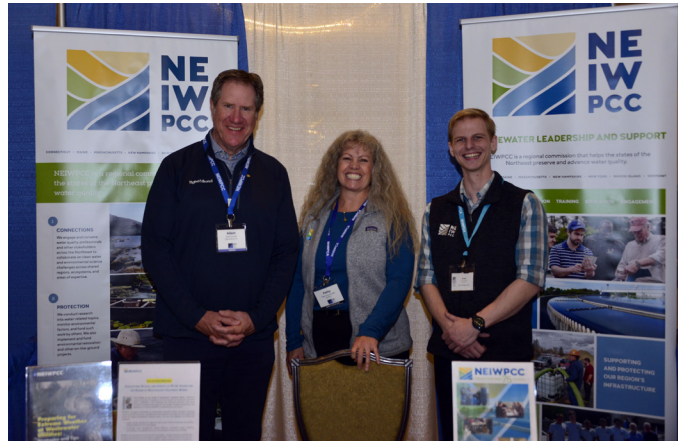
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