



Rhode Island Department of Environmental Management

Office of Land Revitalization & Sustainable Materials Management

# REVITALIZATION



*Environmental Protection Supporting Livable Communities, and a Sustainable Future!*

## RHODE

Issue 5 WINTER 2021

## DEM Responds with PFAS Sampling to Address Potential Contamination and Community Concerns

*By: Nicholas Noons and Zachary Chamberlin*

The Newport Naval Education & Training Center (NETC) is the largest, both in land area and number of operable units, and one of the most complex Superfund sites in the State. The site encompasses the entirety of Naval Station Newport, both past and present, along the western coast of Aquidneck Island. Naval Station Newport was previously one of the largest fuel depots on the east coast, with a total capacity of over 110 million gallons (2.6 million barrels), primarily in a series of underground tank farms in Portsmouth and Middletown. Due to the quantity of fuel stored, the tank farms, particularly the aboveground portions in Melville, had extensive fire suppression infrastructure. The tank farms were constructed during the WWII era and were at least partly still in operation until 1998.

As part of the Superfund Cleanup process at Federal Facilities, such as NETC, a Restoration Advisory Board (RAB) may be convened as a public forum to ex-

*See PFAS on Pg. 3*



## BROWNFIELDS to BEAUTY

*By: Filomena DaSilva*

The Office of Land Revitalization and Sustainable Materials Management (LRSMM) has a Brownfields to Beauty Green Space Initiative currently happening within the Brownfields division of the department. An EPA \$300,000 Site Assessment Grant was awarded to perform assessments for municipalities and non-profit organizations who are looking to redevelop brownfield spaces into more open or recreational areas. Rhode Island is proud to have had several success stories throughout the State from Central Falls to Newport and many in between. To promote this effort, LRSMM will be attending the RI League of Cities & Towns Annual Convention at the Crowne Plaza in Warwick on January 27th, 2022. In the meantime, if you are looking to “Beauty-fi” your City or Town, contact Rachel Simpson ([Rachel.simpson@dem.ri.gov](mailto:Rachel.simpson@dem.ri.gov)) or Kelly Owens at ([Kelly.owens@dem.ri.gov](mailto:Kelly.owens@dem.ri.gov)) for more information.

# LRSSM STAFF IS AT IT AGAIN!

Nathan Arruda, an Environmental Scientist with the Office of Land Revitalization & Sustainable Materials Management, joined ASTSWMO's Materials Management Task Force Subcommittee a couple of years ago and has since been hard at work assisting with a national recycling strategy. Nate is picture to the right.

*By: Nate Arruda*



**A**STSWMO's Sustainable Materials Management Task Force is to provide leadership and promote actions that reduce waste, conserve resources, prevent pollution, and foster sustainability through identifying recycling opportunities and partnerships and through the development and implementation of educational programs about recycling.

Currently our efforts include working in collaboration with EPA providing comments and assistance with the implementation of a National Recycling Strategy. This strategy responds to our nationwide recycling system's challenges through actions outlined under five major objectives: improve markets for recycled commodities, increase collection and improve materials management infrastructure, reduce contamination in the recycled materials stream, enhance policies and programs to support circularity, and standardize measurement and increase data collection.

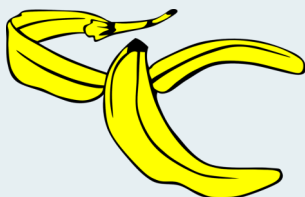


In addition to our work on the National Recycling Strategy, we have been working directly with other state organizations throughout the country in an effort to develop food waste diversion strategies to promote composting and other green disposal alternatives. Other topics of discussion have been the emerging waste streams of wind turbine blades, solar panels, batteries, and other composite materials and how to best manage/recycle these materials.

## **RECYCLING FOOD and COMPOSTING SCRAPS..... a WIN-WIN for the State**

Birchwood Middle School in North Providence is the first school in the State to take part in the [Get Food Smart](#) pilot program sponsored by the Rhode Island Department of Environmental Management and the Rhode Island Schools Recycling Club.

The school's principal, Brian Gilmore, notes that on average, Birchwood produces more than 8 tons of food waste during an academic year. Two tons of that count is usually untouched, making it "perfectly healthy food that could be shared or donated." The school has donated their untouched food supply to St. Thomas Church and will be sending their scraps to a local food composting facility. The principle part of this effort will be realized when the school, together with their lunchroom team, determines the best methods to preventing food waste before it starts. Click [here](#) for photos from the Birchwood Middle School event.



\*Check back in our next issue for more about food waste and its effects on greenhouse gases



## PFAS .....

*Cont'd from Front Pg.*



Both pictures above are of Zachary Chamberlin, an Environmental Scientist with LRSMM, hard at work collecting samples in Melville this Fall.

change information and partnership among citizens, the installation, and the regulatory agencies. The RAB for NETC was founded over 25 years ago and still is chaired and attended by some of the founding members from the local community. One of the primary community concerns of late has been the presence of per- and polyfluoroalkyl substances, better known as PFAS. PFAS are commonly referred to as a “forever chemical” and in the past decade have emerged as a contaminant of concern due to its widespread usage, inability to break-down in the environment over time, and potentially harmful effects on human health and the environment. One of the most common sources of PFAS, specifically as it relates to releases to the environment, is from aqueous film forming foams (AFFF). AFFF is used for extinguishing flammable and combustible liquids and gas, such as petroleum, and was developed by the Navy in the late 1960’s.

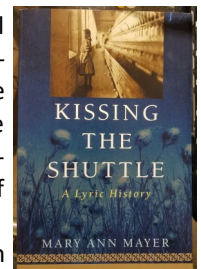
The Navy initiated a base wide Preliminary Assessment of potential PFAS sites at NETC in 2018, followed subsequently by a Site Inspection, which including sampling groundwater at sites where PFAS was known or suspected to have been released. Unsurprisingly, PFAS were detected at various sites throughout the base, primarily at the tank farms and former fire training areas. Local residents and RAB members had raised concerns of runoff from Tank Farm 1 in Portsmouth impacting nearby areas including the Lower Melville Ponds and Narragansett Bay. The timeline for the Navy potentially sampling runoff and surface water in the vicinity would have been 2022 at the earliest and required the Navy coordinating access with the Town and State. In an effort to address the community concerns in a timely fashion and also provide valuable information for the ongoing remedial investigation at Tank Farm 1, OLRSM took the initiative to conduct sampling around Tank Farm 1 using monies which had previously been allocated for PFAS sampling. Sampling was completed by OLRSM representatives Nicholas Noons and Zac Chamberlin at 12 locations around Tank Farms 1 and 2. The OLRSM staff were aided by representatives from the EPA, Navy, as well as a RAB member. Although the Department does not have a standard for PFAS in surface water, PFAS were detected above the Department’s GA Groundwater Quality Standard of 70 ng/L or parts per trillion (ppt) for the sum of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). The OLRSM is coordinating with both the Army Corps and Navy on the suspected sources of these impacts from former foam infrastructure, including foam pump houses, above and below ground foam piping, and foam equipment storage buildings. The OLRSM will be conducting follow-up sampling to better understand potential migration pathways and to evaluate any potential risks to human health and the environment.

## “Kissing the Shuttle” A Lyrical History— by Author Mary Ann Mayer

*Review & Article by Leo Hellested*

Local poet Mary-Ann Mayer, raised in Lincoln, R.I., brings history alive in a unique way; through lyrical rhythms, sensory details, and diverse voice in her new book of poetry, “Kissing the Shuttle”. The poems creatively cover the triumphs, tragedies, and environmental practices of R.I.’s industrial past. With R.I. and the birthplace of America’s Industrial Revolution as the backdrop, she takes readers on a vivid, yet lyrical tour of the mill towns along the Blackstone, and the lives of our recent predecessors. From the factory floor with its resulting environmental impacts, to the tuberculosis sanatorium, her book is a must read for any student of Rhode Island’s history.

As a recent guest speaker and participant in the Charles River Museum’s Mill Talk Series, in Waltham Ma, additional information on Ms. Mayer, and her readings can be found at <https://youtu.be/qGdaftZIJPO>. Among the dozens of poems contained in the work, the closing verses of the poem, “Sunday Afternoon” spoke most vividly to me, by highlighting some typical and known mill practices of those times. Those routine practices resulted in the



See Mayer on Pg. 4

# Two New Retail Stores in Woonsocket

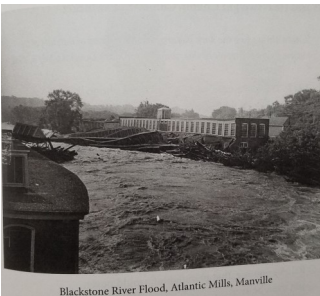
By: Jeff Crawford

In August 2017, the Office of Land Revitalization and Sustainable Materials Management (OLRSMM) issued a Letter of Responsibility for the Mann Family Nominee Trust property located at 1099 Social Street in Woonsocket, RI. The Notification of Release identified some petroleum contamination, Polycyclic Aromatic Hydrocarbons and Lead in site soils which then initiated an investigation on the 1.4 acre commercial site. A Program Letter was issued the following Spring. The property owners proposed to remove some contaminated soils, install a Department approved cap and market the property for commercial reuse.

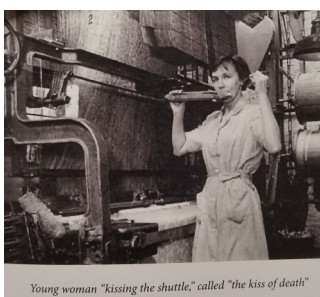
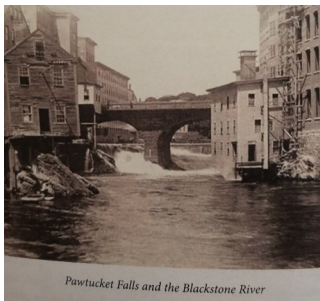


In September 2019, a potential purchaser from Rhode Island was identified, and a Voluntary Procedure letter issued. The potential purchaser requested a Bona Fide Prospective statement which was signed on November 4, 2019 followed by a Remedial Decision Letter a few days later. The following summer a Remedial Agreement was entered into with the purchaser and a Remedial Action Work Plan (RAWP) submitted the next month. The RAWP was approved one month later and site work commenced during the Fall/Winter of 2020. Work was completed in April 2020, and a Remedial Action Completion Report submitted on May 23, 2021. The property approved Environmental Land Usage Restriction was recorded on May 28, 2021 and a Letter of Compliance was issued on June 8, 2021.

## Mayer



.....Cont'd from Front Pg



All excerpts & photos taken from "Kissing the Shuttle" Copyright 2018 Mary Ann Mayer

environmental legacy we continue to address and cleanup to this day here at DEM. Specifically:

*"... Tomorrow, the violence again.  
the river goes crazy with color  
the mills spew into the Blackstone ...*

*It's said, you can tell what the mills are doing each day  
by the color of the river.  
Mustard, vermilion, lime-green, magenta on Thursday ...*

*Branding and burning the river –  
heavy, heavy metals, dyes, varnishes, solvents, bleach  
and a dark-red poison to kill the cotton bug –*

*a hot effluent slop  
raging seaward, forty-eight miles  
from Quinsigamond to Seekonk,*

*with all the waste that pervert this river,  
all the measures destined for her soul."*

The title itself, "Kissing the Shuttle", as explained in the book's Forward, was not an expression of love for the loom, but rather a method of refilling the weaving shuttles with bobbins of thread. The workers, mainly women and young girls, placed lips against the shuttle's eye to pull its thread through. Such a contagious practice, called the "kiss of death", infected weavers, thereby establishing a nexus between labor and the tuberculosis epidemic at that time; which was another poignant historical theme equally relevant today, in a world focused on improving public health.



# Staff Corner



# T

he Office of Land Revitalization & Sustainable Materials Management would like to congratulate Nicholas Noons, PE and Ashley Blauvelt, PE who have recently been promoted to Environmental Engineer IV. They will be working closely with Kelly Owens and Matthew DeStefano to make program enhancements and expand the office’s ability to work through the many complex sites, funding sources, and new initiatives in the future.

Ashley’s promotion to Section Supervisor in the State Clean up Program will allow LRSMM to separate various Program elements, enabling the office to aggressively pursue new EPA TBA funding while freeing up some capacity to also re-think LRSMM’s approach to their day-to-day operations. Enhancing these priorities with additional supervision is key to maintaining focus and moving the office forward as new challenges arise, and achieving the targeted successes.

Nick has taken on a larger role running the Federal clean up programs, including managing staff and administering the federal DOD grants to ensure adequate program funding. Those duties will continue to grow going forward.

Leo Hellested, Administrator for the Office of LRSMM notes that “This re-alignment should also create greater opportunities for cross training newer staff within these sections, and hopefully offer additional opportunities for all staff to engage new challenges and connections moving forward.”



Ashley Blauvelt, PE



Nicholas Noons, PE

## LRSMM WELCOMES NEWEST ENVIRONMENTAL SCIENTIST



The Office of Land Revitalization & Sustainable Materials Management welcomes our newest hire Michelle Furbeck. Michelle graduated with a M.S. in May 2021 from Clemson University’s Belle W. Baruch Institute in coastal Georgetown, South Carolina. Her master’s thesis analyzed field and eddy covariance tower data of CO<sub>2</sub> gas exchange, with measures of water quality and depth, to help improve understandings of salt marsh productivity in the face of climate change. Prior to studying at Clemson, Michelle worked as a research assistant at the Wells National Estuarine Research Reserve in Wells, Maine. She holds a B.S. in Marine Science and a minor in Applied Mathematics from the University of New England in Biddeford, Maine. Having been born and raised in Groton, Massachusetts, Michelle is pleased to be back in New England, and is very excited to begin her career at RIDEM.

# OSCAR the Q&A Mascot

By: Filomena DaSilva



To submit questions for future editions of **REVITALIZATION RHODE** click [here](#).

## This Week's Question:

### How do I get rid of my Christmas tree after the holiday?

'Tis the season for decorations of all kinds. This week's question and answer segment reminds you of how to properly dispose of your tree after the Christmas holiday. Most municipalities will pickup your tree during regular weekly curbside pickup for a specific period of time. You may also drop it off at your local transfer station. Some municipalities participate in a chip-a-tree program where residents can drop off their trees at local neighborhood playgrounds or parks after Christmas to be collected by City crews for chipping. Remember to remove any tinsel, ornaments or lights from your trees and wreaths. These items along with wires or bags can be dropped off for composting in certain locations. Be sure to check with your local City or Town for their particular requirements. Have a safe and happy holiday season!



## Let it snow!

- BLIZZARD
- COAT
- COLD
- DECEMBER
- EARMUFFS
- FEBRUARY
- FIREPLACE
- FLURRIES
- FROZEN
- GLOVES
- HOT CHOCOLATE
- ICE
- ICE SKATES
- ICICLE
- JANUARY
- MITTENS
- SCARF
- SHOVEL
- SLED
- SLUSH
- SNOWBALL
- SNOWFLAKE
- SNOWMAN
- SWEATER
- WINTER



## ACTIVITY CORNER



By: Holleigh Pouliot



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