

"The Big 6"
Stormwater
Pollutants

Yard waste, pet waste, litter, household waste, auto waste, and pesticides/herbicides. Some of the ways we can prevent these common pollutants from entering stormwater systems and then entering our streams is to avoid littering, picking up after pets, not fertilizing before it rains, making sure your car isn't leaking fluids, and not dumping any items in storm drains.

#### Introduction

The WCWLN completed its last module on November 20th at the Walnut Creek Wetland Park in Raleigh. There were a total of six graduates, each of which presented their community projects to fellow participants and everyone in attendance. Three Spring 2021 graduates of the Raleigh Watershed Learning Network (RWLN) attended this 'graduation ceremony' and spoke individually to these new grads about their experiences with the RWLN. The RWLN was the first program that PEJ implemented, which was based on the <a href="Atlanta Watershed Learning Network's">Atlanta Watershed Learning Network's</a> innovative model program. The schedule for the last module included; final community project presentations by participants, Clean Water Education Partnership (CWEP) presentation, lunch, trivia game, and a graduation ceremony.



Image 1. Fall 2021 WCWLN Graduates! (From left to right: John, Caroline, Amy, Ashley, and Denise. One participant not included in the photo). All photos courtesy of Aniya Bourne.





Image 2. WCWLN participants (Caroline and Daphne) presented their final project on Rocky Branch Creek Greenway Clean up.



Image 3. Spring 2021 Raleigh Watershed Learning Network graduates(From left to right: Rachel, Sarah, and Parnell).



#### **Community Project Presentation**

The purpose of the Community Project presentations was for the participants to incorporate what they learned from the past five modules and apply this to their community of choice. Each of these participants were assigned a mentor to help them develop their project. Some of the topics that we covered in this program were: green infrastructure, stormwater and flooding, watershed management, equitable development, community advocacy and environmental justice. The six project summarizes from this years graduates are below:

- Amy- "Downspout Disconnection DIY in Southeast Raleigh". A downspout is
  a vertical pipe used to drain rainwater off a roof. Disconnecting these
  downspouts and redirecting the rainwater onto grass or into a garden, reduces
  stormwater runoff into yards, driveways and entering into stormwater pipes. Amy
  was able to show this process in her project, she decreased her water usage (bill)
  and used the runoff to water her garden.
- 2. Ashley- "Gaia Raleigh". Created a mobile application called Gaia Raleigh, which is used for the residents that live in or near Raleigh. The purpose of this application is to engage the community in taking care of the environment and learn more about its resources. This application was created by MIT APP Inventor and required block coding skills by Ashley. The application has four tabs to choose from: learn, engage, lead, and benefit. The learn tab provides various resources about watershed basics and management. The engage tab, helps users engage with the environment and resources related to nearby cleanups. The lead tab encourages the user to lead a group based on various programs. As well as ways to apply for an award with the City of Raleigh. The benefit tab, explores the programs that are readily available to the community. This application is not yet published, but will be ready by the end of this year. For more information on this application you can visit the link below:

https://www.youtube.com/watch?v=VZ52vHGMcE4

3. Caroline and Daphne- "NCSU Creek Clean Up". Two of our participants teamed up to host a litter clean up along the Rocky Branch Greenway beside Rocky Branch Creek on NC State University's campus. During this clean up, Caroline and Daphne took this opportunity to teach the volunteers about watershed management and topics related to the past five modules of the WCWLN. Participants were able to document the number of litter collected (thirty plus masks, two pairs of gloves, twelve bottles), mostly notably finding twenty tennis balls due to the creek being adjacent to tennis courts.



- 4. **Denise-** "Wake County Big Sweep Hedingham Subdivision". Denise hosted her own private clean up in her neighborhood with the help from Alexandara Heinemann, Wake County Big Sweep Coordinator. She had a check in station and distributed supplies to the twelve volunteers. The group collected sixteen bags of trash, ten recyclable bags, sofa pillows, box springs, lawn chair, TV, four tires, scrap metal, car fender, and various car parts.
- 5. **John-** "Stream Monitoring Little Rock Creek". This project will consist of stream monitoring of the Little Rock Creek. This will be a year long commitment with the City of Raleigh's Stream Monitoring Program, he will be starting the week of November 22nd. His goal is to educate those on the creek's health, support municipality science goals, and to encourage community engagement. This is important because the Little Rock Creek has historically been known to be polluted. He will be using a water monitoring kit and will continue to work with his WCWLN mentor on this project.



Image 4. Ashley introduced us to her application called "Gaia Raleigh".





Image 5. Caroline Wofford presented the CWEP program and Carmela Teichman (far right) spoke on the importance of public outreach.

#### **Clean Water Education Partnership**

Caroline Wofford is the Stormwater Education Coordinator of the Clean Water Education Partnership (CWEP). CWEP is a community education program within the Water Resources Program of the Triangle J Council of Governments, which is a regional planning agency that addresses the following focus areas; affordable housing, energy, transportation, aging and human services. The goal of the CWEP is to educate the public on promoting clean water, healthy ecosystems, and improving people's quality of life. Caroline provides outreach within the following river basins; Neuse, Tar-Pamlilco, and Cape Fear. Her team continues to provide clean water education virtually and in outdoor spaces; pre-COVID all of these opportunities were done in person. Carmela Teichman is the Stormwater Educational and Outreach Specialist for the City of Raleigh. In this role she provides outreach in classrooms, professional lunch & learns, and events in the Raleigh area. She addressed the importance of the stormwater fee, which is used to fund all stormwater programs such as projects to address flooding, erosion, water quality, and replace aging infrastructure.

To get involved with CWEP please visit their website: nc-cleanwater.com

**Upcoming events:** CWEP Regional Creek Week - March 12-19, 2022





Image 6. Partners for Environmental Justice members and WCWLN participants engaged in the CWEP presentation.



Image 7. Maggie Bailey is the president of We Plant it Forward, an environmental community service program located in Raleigh. This program promotes the benefit of trees and tree planting specifically working with corporations, community organizations and schools. **To learn more about this program, please visit this website:** https://weplantitforward.org/





Image 8. Renai Nez, PEJ's Program Director presented the program trivia. The winners of the trivia received a \$10 Starbucks gift card.

#### Conclusion

This is the second completion of PEJ's Watershed Learning Network. We are very proud and congratulate the Fall 2021 graduates in gaining knowledge and skills to take action in improving conditions in their communities and to promote sustainable solutions. We would like to thank the Town of Cary and the City of Raleigh for funding the WCWLN and Keshi Satterwhite for coordinating the Fall 2021 program. PEJ would also like to thank the guest speakers from the following organizations: the City of Raleigh, Warren County Environmental Action Team, North Carolina Department of Environmental and Natural Resources, Water Resources Research Institute, Clean Water Education Partnership, North Carolina Cooperative Extension, North Carolina State University department of Biological and Agricultural Engineering. PEJ would also like to recognize our board and staff members who were able to help coordinate the refreshments, printing materials and providing assistance throughout this program.

A final component of this Watershed Learning Network will be the design and construction of seven residential green infrastructure projects within the Walnut Creek watershed. The projects that are currently proposed are four rain gardens and one cistern in Raleigh, along with two rain gardens and one cistern in Cary.

PEJ hopes to host another WCWLN in 2022; please visit our website for updates on the WLN and community projects at: https://www.pejraleighnc.org/



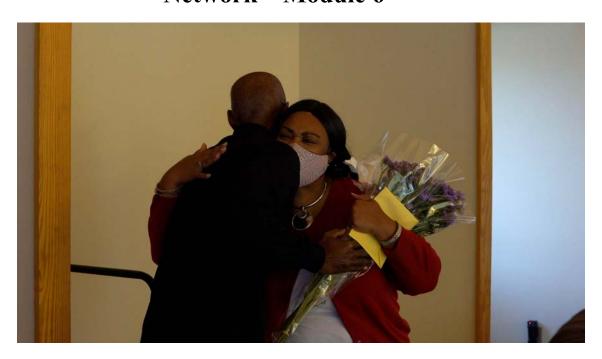


Image 9. Amin Davis (PEJ Board Member) provided Keshi Satterwhite with a gift and flowers from PEJ.



Image 10. Carolyn Winters, PEJ Treasurer (left) and Amy (right) at the WCWLN Module 6 celebration.