



River Currents



Spring 2021

www.gehwa.org

Issue 73

It has been challenging promoting the Mission of GEHWA/GEHRC during the Covid Pandemic of 2020/2021

Our mission is:

- To protect and restore the natural, cultural and recreational resources of the Great Egg Harbor River Watershed;
- To promote research and action to determine and secure a healthy river system;
- To expand public awareness, education and appreciation of the watershed's many valuable and unique resources

Many of our outreach programs had to be cancelled or promoted via Zoom. This has limited our contact with the public. But we have worked over the past year, to implement new methods in our efforts to engage the public's interest in both enjoying and protecting the GEHR and Watershed.

In this issue we will explore the water quality of the Great Egg Harbor River and Watershed. In our next issue we will explore how we have overcome some of the isolation imposed by Covid restrictions by developing new outreach programs. In particular we will explore our new "GEHWA Mission Map".

GEHWA'S new "Mission Map" is an interactive tool that you can use to explore the watershed. By using the Legend, Layer List and Map Switcher you can look at the "Federal Wild & Scenic Boundary", "Water Quality", "Land Use", "Known Contaminated Sites", "Groundwater Contamination", "Streams", "Marine Debris Project", and much more. You can explore this interactive site @ <https://www.gehwa.org/gehwa-mission-map/>

If you have any exciting NATURE news you would like to share, please let Lynn know. She will forward that information to the GEHWA members and friends.

Call or text Lynn @ 856-649-2792 if you have any questions.

A Look at the Water Quality of the Great Egg Harbor River A Federally Designated Wild and Scenic River

Wild and Scenic Rivers, like all rivers, are protected under the Clean Water Act, which requires states to establish water quality standards for waters within their jurisdiction. Every two years, states are required to report whether these standards are being met. In 2018, the National Park Service (NPS) compiled information from the most recent state assessments to identify the water quality status of all designated Wild and Scenic Rivers. Based on the information available at the time, NPS determined that roughly 44% of all Wild and Scenic River miles did not meet their water quality standards, with temperature, mercury, and metals being the most common causes of impairment. Want to learn more about Wild and Scenic River water quality? Read the full report found on the rivers.gov website (www.rivers.gov/documents/state-water-quality-assessments.pdf).

Wild and Scenic River	Reporting Cycle	Miles by Water Quality Classification	Listed Impairments
Great Egg Harbor	2014	<i>Good:</i> 4.8 <i>Impaired:</i> 134.3 <i>Unassessed:</i> 8.3	pH; copper; arsenic; mercury in fish tissue; mercury in water column; total coliform; E. coli; dissolved oxygen; PCB in fish tissue

Great Egg Harbor River Council uses a watershed approach to water quality

With a watershed area of about 521 square miles and 129 river miles designated by Congress in 1992 as components of the National Wild and Scenic River System, the Great Egg Harbor River Council uses a watershed approach that focuses on how watershed lands are used and how stormwater runoff is managed to address water quality protection.

Since about 90% of the watershed is in the Pinelands National Reserve, where surface waters are classified as Outstanding National Resource Waters, an anti-degradation designation, it is incumbent on the Environmental Protection Agency (EPA), the New Jersey Pinelands Commission, and the New Jersey Department of Environmental Protection (NJDEP) to monitor and protect the water quality of the Great Egg Harbor Watershed.

Starting in 1980, the NJ Pinelands Commission was established along with the Pinelands Comprehensive Management Plan and a strong regional land use planning and zoning program to review and approve all the land use in the Pinelands with natural resource protection in mind. One of the main components of the Pinelands Comprehensive Management Plan was to protect surface and ground water through stormwater infiltration and nitrate dilution.

As part of the Wild and Scenic Study and Designation process in 1990, the 12 River Council Municipalities agreed through a Memorandum of Understanding (MOU) to create individual Local River Management Plans in compliance with the Pinelands rules for protecting the River. These remain in effect today.

One important tool used in the GEH watershed for protecting water quality and habitat is the permanent protection of natural open spaces. **...continued on page 3**

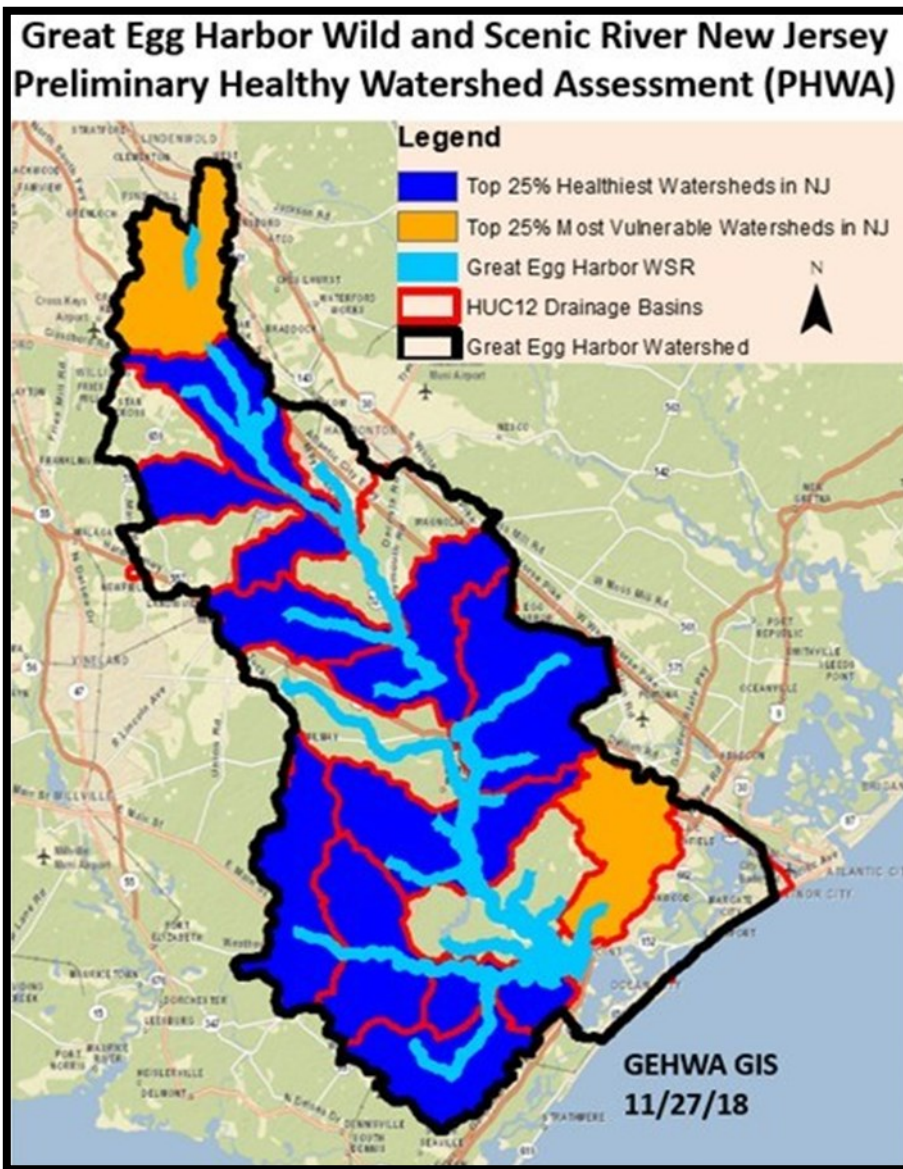
...continued from page 2 As part of the Wild and Scenic Designation process, the NJDEP and others set a priority for open space preservation in the Great Egg Harbor Watershed. Because of this, there are currently more than 127,000 acres of preserved open space in the watershed, and new preservation initiatives are ongoing.

Though preservation efforts protect water quality, 15,000 acres in the headwaters of the GEH watershed are not in the Pinelands National Reserve and are heavily urbanized with outdated stormwater management. Another water issue in the headwaters is the transfer of groundwater out of the watershed that has the potential to affect river flows during low flow conditions. Furthermore, nonpoint source pollution from stormwater runoff is the main cause of degradation to water quality in the watershed. To address these land use issues and other water quality issues, the River Council employs in house GIS data analysis at the smallest subwatershed scales possible to pinpoint nonpoint source pollution sources, pinpoint direct stormwater discharges to surface waters, to find failing stormwater management measures, and to locate potential additions to open space.

The GEH River Council also continually promotes the EPA's ever evolving municipal separate stormwater systems rules (MS4s), provides education and outreach regarding nonpoint source pollution prevention, and has recently invested over \$22,500 in quantifying and locating impervious surfaces and promoting green infrastructure projects at the top of the watershed with the goal of getting more rainwater into the ground.

A new national EPA watershed protection tool has been recently used here in New Jersey by the National Park Service Water Resources Division in Colorado to identify high quality waters for protection is the "Preliminary Healthy Watersheds Assessments Project" (PHWA). GEHWA used the PHWA to assess the 19 HUC12 subwatersheds in the Great Egg Harbor Watershed. HUC, hydrologic unit codes, are numerical codes that uniquely identify hydrologic units. There are six levels of HUC classification: 2-digit (region), 4-digit (subregion), 6-digit (accounting unit), 8-digit (cataloguing unit), 10-digit (watershed), and 12-digit (subwatershed). Analysis of the GEH HUC12 subwatersheds revealed that there are 10 HUC12s in the top 25% Healthiest Watersheds in NJ, ...continued on page 4

Preliminary Healthy Watersheds Assessments (PHWA) map produced by the GEH Watershed Association in 2018 showing the HUC12 subwatersheds and their health. Map provided by Fred Akers.



...continued from page 3 2 HUC12s in the top 25% Most Vulnerable Watersheds in NJ, and 7 HUC12s that are not listed. These are detailed in the map on page 3. The PHWA corroborates the GEH River Council's historic focus on the headwaters of the watershed to improve the performance of stormwater infiltration, reduce nonpoint source pollution and reduce impervious cover upstream to protect watershed wide water quality downstream.

With the establishment of the GEH River Council due to the Wild and Scenic Designation, there is a forever effort in place for local river managers to monitor the effectiveness of federal and State water quality measurement and protection, and to provide supplemental monitoring, analysis, investment, and advocacy to reduce pollution, and enhance the protection of water quality in the Great Egg Harbor Watershed.

Great Egg Harbor Watershed Association uses its mission to provide education and outreach opportunities

Partnership Wild and Scenic Rivers work diligently on protecting and improving the water quality of their rivers. Below Lynn Maun, Education Outreach Coordinator of the Great Egg Harbor Watershed Association, describes one way the Association works to encourage students to take an interest in the Great Egg Harbor River's water quality.

In the Great Egg Harbor Watershed's (GEHWA) mission statement, as seen on the 1st page, it says we are, "to expand public awareness, education and appreciation of the watershed's many valuable and unique resources." To accomplish that goal, we engage with a diverse audience from pre-school to college students to adults by providing programs that address threats to, and ways to, monitor and improve water quality. One of our many educational programs is described below.

Doris Letts, a 5th grade science teacher in the Williamstown Middle School in Monroe Township, NJ first invited the GEHWA into her classroom in 2015 to reinforce what her three eighty-minute classes had been learning about ecosystems and what role humans play in polluting them. After she shared what she was doing with the other 5th grade science teachers, the program quickly expanded to include all 21- 5th grade classes. From 2015 to 2021, 3380 students and 224 adults have learned about water pollution and its impacts on the Great Egg Harbor River and Watershed.



EnviroScape Model

demonstrate stormwater runoff by using the EnviroScape Model. Then we also embark on the discovery of South Jersey's hidden resource, "groundwater" with the use of the Groundwater Model. We engage in discussions on how humans can have negative impacts to both the river and groundwater and then look at ways to improve and protect these vital resources.

During the program the students learn that they can visit a unit in the National Park System just by visiting the Great Egg Harbor River which flows through Monroe Township. They travel on the river, via slideshow, from its beginnings in Berlin, NJ to where it empties into the Great Egg Harbor Bay. Along the way, they meet a few amazing animals that can be found in or near the river. After their journey, we talk about and



Groundwater Model

Calendar of GEHWA and GEHRC Meetings 2021

(Check out our calendar at www.gehwa.org for additional information about upcoming events)

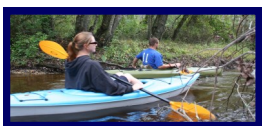
*Meetings locations will be announced prior to the event. When Covid restrictions are eased or lifted we hope to resume holding meetings at the Warren Fox Nature Center in Estell Manor. All meetings at the Nature Center will begin at **6:30 PM**.*

Wednesday, June 16, 2021 - Great Egg Harbor NS & R River Council Meeting (Meeting will be via Zoom with details sent prior to meeting)



Tuesday, July 27, 2021 - GEHWA Member & Friends Picnic and Campfire (Location and details will be provided closer to the event).

Wednesday, August 18, 2021 - Great Egg Harbor NS & R River Council Meeting will be held on the "Duke of Fluke".



Saturday, September 25, 2021 - GEHWA— Canoe/Kayak event on the Great Egg Harbor River (Location and details will be provided closer to the event).

Wednesday, October 20, 2021 - Great Egg Harbor NS & R River Council Meeting at the Warren Fox Nature Center at 6:30 PM.

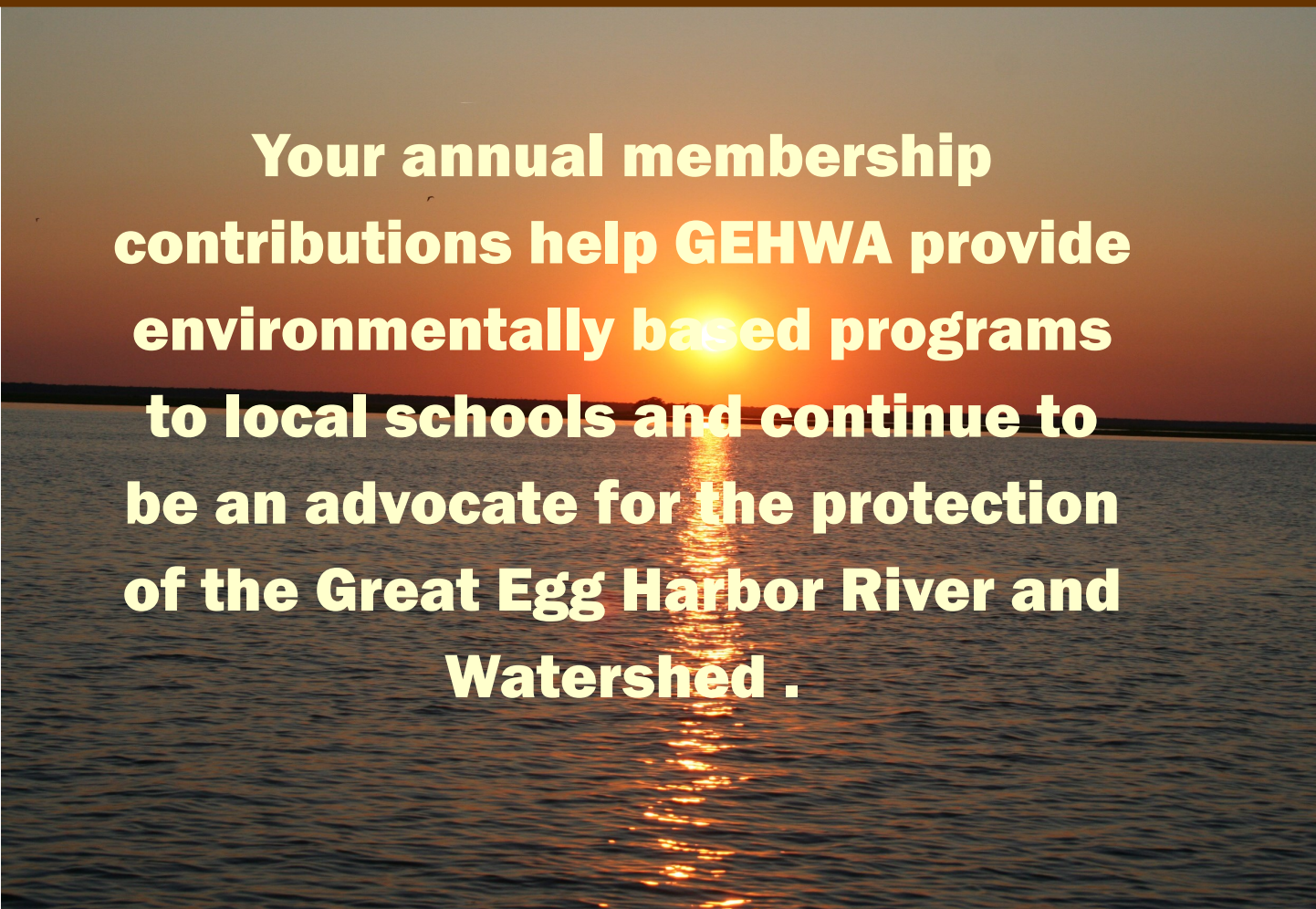
Tuesday, November 23, 2021 - GEHWA Member Meeting— Program to be announced. (Planning for an in-person meeting at the Warren Fox Nature Center at 6:30 PM).

Thursday, December 9, 2021 - Great Egg Harbor Watershed Association Annual Trustee Meeting (6:00 PM Harley Dawn Diner, Hammonton).

Wednesday, December 15, 2021 - Great Egg Harbor NS & R River Council Meeting at the Warren Fox Nature Center at 6:30 PM.

Please plan on attending these events.

(If you are interested in attending a meeting being held via Zoom please contact Lynn Maun @ lynnkmaun@comcast.net)



Your annual membership contributions help GEHWA provide environmentally based programs to local schools and continue to be an advocate for the protection of the Great Egg Harbor River and Watershed .

GEHWA Membership Information

Your membership supports our mission and ensures our survival as a non-profit advocate, as we work to protect and preserve the Great Egg Harbor River and Watershed throughout the year. Your support is needed now more than ever. Without you, we could not exist. Thank you for your support!

Name/Organization: _____

Street Address: _____

City, State and Zip: _____

Phone Number: _____

Email Address: _____

Yes, I would like to receive notices by Email.

Annual Membership: Individual: \$10; Family: \$15; Supporting: \$35; Patron: \$50; Corporate: \$100

Please mail this form along with your check to: Great Egg Harbor Watershed Association,
Membership P.O. Box 109, Newtonville, NJ 08346

The Great Egg Harbor Watershed Association's Environmental Programs are FREE

We offer our environmentally focused programs **free** of charge to augment existing school curriculum. A school's environmental programs are often threatened when faced with annual budget cuts. If you are a parent, and/or an educator, and feel our programs would enhance the environmental education that your child/student is receiving, please contact the appropriate individual in your school and request that they take advantage of the Great Egg



St. Vincent DePaul student puppet show



Student holding a Dragonfly Nymph

Harbor Watershed Association's **free** programs. If you would like additional information please contact Lynn Maun, Education Outreach Coordinator at 856-649-2792 or lynnkmaun@comcast.net

REMEMBER our environmentally focused programs are FREE!



Students from Alder Avenue School searching for macroinvertebrates

Contact Information

Great Egg Harbor Watershed Association
Julie Akers, President (856) 697-6114
Fred Akers, Administrator (856) 697-6114
P.O. Box 109, Newtonville, NJ 08346
Email: fred_akers@gehwa.org
Web Site: www.gehwa.org
Lynn Maun, Coordinatoer (856) 649-2792
Email: lynnkmaun@comcast.net
National Park Service
Paul Kenney (215) 597-5823; Paul_Kenney@nps.gov
NJ DEP Watershed Management Office
(609) 777-0580

Atlantic County Department of Planning
(609) 645-5898
US Army Corps of Engineers (215) 656-6725
NJ DEP Regulatory Office for Atlantic County
(609) 292-8292
NJ DEP Enforcement Officer (732) 255-0787
Pinelands Commission
(609) 894-7300
NJ DEP Hotline 1-877 WARN DEP

To report an environmental incident impacting NJ, call the Toll-Free 24—Hour Hotline
1-877WARNDEP, 1-877-927-6337

If you should see debris or shoaling while traversing on New Jersey waters please call:
1-877- WARNDEP (1-877-927-6337)



Great Egg Harbor Watershed Association
PO Box 109
Newtonville, NJ 08346-0109

«AddressBlock»