

PHOTO BY PEGGY DOUGLAS

“PERHAPS THE TRUTH DEPENDS ON A WALK AROUND THE LAKE.”

Wallace Stevens – American Poet

Sallie Forman, Founder/President

Sadly, Delaware is losing its wetlands at a rate of over 50% in the last 30 years. Wetlands are natural filters that remove dangerous substances before they enter water bodies. They can help reduce flooding and provide habitat for wildlife. They stabilize the shoreline and require very little maintenance. If you walk around our Rehoboth Lakes - Silver Lake, Lake Gerar and Lake Comegys – you will see that many wetlands have been replaced by lawns, rip rap and bulkheads.



That is why we ask lakefront property owners to consider installing affordable, natural riparian buffers with beautiful wildflowers and plants you'll enjoy year-round, such as this one at Lake Comegys installed by homeowners.

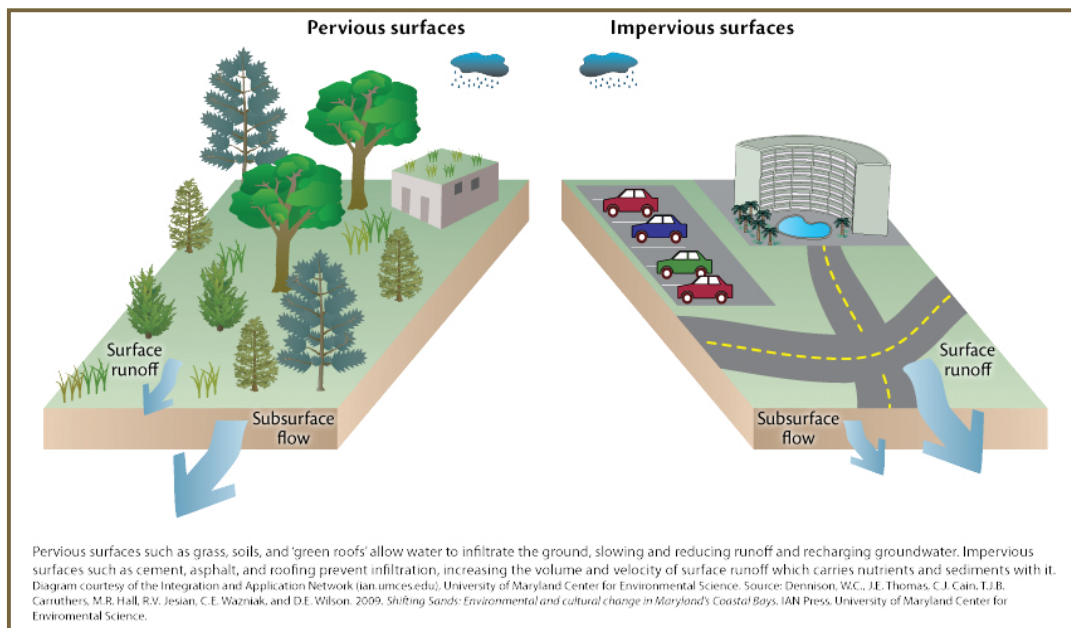
As you read through this newsletter, you will see a recurring theme in featured articles, which is the need for Rehoboth to develop and implement a Comprehensive Stormwater Management Plan (CSMP) that would require an updated infrastructure to improve the quality of water entering our lakes and the ocean and to protect our vulnerable coastal community from crippling floods

during serious and ever-increasing storm events brought about by climate change and some of the most severe sea level rise on the planet.

A recent example of this was the nor'easter from the remnants of hurricane Ian as it moved up the coast. It resulted in flooded Rehoboth streets and serious beach erosion that closed beach access for days. Closing the beach seriously impacts tourism that is so important to Rehoboth's economy. Rehoboth's 2020 Comprehensive Development Plan (CDP) includes the CSMP, recommended by SOLA3 for the last 10 years, yet it has not been considered by the Board of Commissioners.

SOLA3's workshop "Water, Water, Everywhere" (postponed from 2020 because of the pandemic) featured expert speakers who provide great insight into these environmental threats and ways to prepare for them. Highlights are featured herein, along with a link to view the entire program.

As you see from the content of this newsletter, it has been a busy year for SOLA3. I remain eternally grateful to the SOLA3 board for their dedication and hard work to accomplish our mission; to the generous support we receive from our "friends;" the continuing media coverage we receive highlighting the lakes' and environmental issues; and our role in addressing them. Our wish to all for 2023 is that the experience of how to manage and survive a pandemic will keep us safe and enable us to enjoy the upcoming holiday season and New Year with family and friends..



HOW CAN A STORMWATER MASTER PLAN HELP YOUR COMMUNITY?

Michelle Schmidt, Director, Conservation and Watershed Planning, Delaware Center for Inland Bays

The remnants of Hurricane Ian recently brought several inches of rain to our area. While we must be thankful that we didn't experience anything close to what Floridians did, we still need to recognize the impacts that these storms have on our communities.

Storm events such as this illustrate why it is critical that we have a plan for managing increased stormwater.

Stormwater not only causes flooding which can threaten human safety, it also causes increased pollution in our local waterways including the lakes, bay and ocean in and around Rehoboth Beach. Stormwater Master Plans provide a roadmap for communities to handle stormwater runoff and nuisance flooding. Simply put, it is a tool to protect life, property, and the environment.

SMPs are tailored to the community and typically include:

- An inventory of the existing stormwater system;
- Quantification of stormwater runoff and associated nutrient pollution;
- Identification of potential flood hazards and problem areas;
- Identification and prioritization of capital improvement projects to reduce flooding frequency;

- Recommended improvements to water quality; and
- Cost of implementing each management practice or strategy.

These plans are necessary because of the large amount of hard surfaces that prevent water from naturally seeping into the ground. Instead, stormwater rushes across roads, sidewalks, driveways, etc. picking up pollutants until it enters a drain or some body of water.

Older stormwater infrastructure might not be designed to handle the amount of water that is now entering the system today. Stormwater Master Plans identify projects to update aging infrastructure as well as green infrastructure projects to help slow the flow of water and allow more infiltration. These types of projects can improve water quality which is important for coastal communities.

The cost of developing these plans may lead to sticker shock. However, the long-term benefits to safety and pollution reduction outweighs that cost. It is always better to have a plan and be proactive rather than reactive when the next post-tropical cyclone or heavy rain event rolls through.

SOLA3 SPONSORS “WATER, WATER, EVERYWHERE” WORKSHOP



James Lee



Danielle Swallow



Steven Smailer



Michelle Schmidt

Sallie Forman, SOLA3 President

The new Rehoboth Beach Elementary School was the site for this very successful and relevant workshop on September 10. The purpose of the workshop was to bring our coastal communities together with expert speakers to alert them to the threats that will result from dangerous conditions created by climate change and sea level rise. These conditions can seriously impact the local economy and our quality of life.

Tony Pratt, former administrator of Shoreline and Waterway Management for DNREC, was the keynote speaker. In that position, he managed beach renourishment and widening the Delaware beaches, along with raising the dunes, to protect adjoining real estate from flooding. He cited increased flooding throughout the area because of more frequent storms that deliver large amounts of rain. He said that Rehoboth’s aging drain pipes allow bacteria to flow into the ocean and the lakes and were likely responsible for closing the Rehoboth beaches this year. The way to remedy this, and effectively manage flooding, is for Rehoboth to develop and implement a comprehensive stormwater management system.

James Lee, Community Relations Officer, DNREC’s Division of Climate and Coastal and Energy, provided valuable information on how Delaware is preparing for the effects of climate change, the need to reduce planet-warming emissions, providing programs for low to moderate income families to have access to solar power, and Gov. Carney’s program to plant millions of trees throughout the state.

Danielle Swallow, Coastal Hazards Specialist of Delaware’s Sea Grant Marine Advisory for the University of Delaware, focused on how the U.S. will see as much sea level rise by 2050 as it has seen in the last century. She informed us that Delaware stormwater management regulations do not require climate change to be factored in, but that to prepare for flooding, communities should consider adding future conditions into their policies, plans and codes; should avoid building in floodplains, if possible; and incorporate green infrastructure or retrofit existing infrastructure.

Steven Smailer, Director, DNREC Division of Water, presented the details of Federal and State regulations for structures and shoreline stabilization that apply to Silver Lake and Lake Comegys, because they are wetlands and subaqueous lands. He stated that private claims of lake ownership will be handled on a case-by-case basis.

Michelle Schmidt, Director, Conservation and Watershed Planning, Delaware Center for Inland Bays, spoke about the need for communities to have a comprehensive stormwater management plan to reduce flooding caused by severe weather conditions, [see her detailed article in this newsletter on p. 2].

Go to our Website – sola3.org – to access the full video of the workshop and front-page coverage by the *Cape Gazette*.

TONY PRATT JOINS SOLA3 AS A CONSULTANT



Tony Pratt probably needs no introduction. He is well known throughout our community because of his outstanding 38-year career with DNREC, where he served as the Administrator of the Shoreline and Waterway Management Section, retiring from that position in 2018.

SOLA3's Board of Directors is pleased to announce that Tony will be working with us on the issues that are important to accomplishing our mission, and where he has great expertise, including sediment deposition issues, sea level rise impacts, coastal community resilience, waterway management, flood mitigation, and storm response and recovery issues for communities. Welcome "aboard", Tony.

SOLA3 PRESIDENT ADDRESSES HEALTH OF LAKE GERAR AT REHOBOTH MAYOR AND COMMISSIONERS' WORKSHOP

Sallie Forman, SOLA3 President, presented data from the University of Delaware's Sea Grant Division for testing at Lake Gerar that was done twice yearly, over a 6-year period; the last test was done in September, 2022. Their testing revealed that dissolved oxygen and bacteria do not meet State standards. What they have seen on a regular basis in Lake Gerar is consistent algae, murky green water with sulfurous odors. These results are very similar to those presented by Envirotech, who manages the lake.



Fill in at Lake Gerar

Ms. Forman stated EPA's position that dissolved oxygen is an important measure of water quality as it is a direct indicator of an aquatic resources ability to support aquatic life. Thus, the test results may explain the fish kill at the lake in May of 2020. Furthermore, the bacteria flowing into the ocean from the outfall certainly has to be contributing to the multiple emergency closings of the beach because it is harmful to humans. Closing down the beaches seriously impacts the economy that Rehoboth relies on so much from tourism.

She urged Rehoboth's Board of Commissioners to conduct another workshop to learn in more detail about the many benefits of a comprehensive stormwater

management plan that include protections for Lake Gerar's and Silver Lake's wetlands and aquatic ecosystems, improved water quality of these receiving water bodies, conservation of water resources, and protection of public health, lives and property from flooding during serious and ever-increasing storm events.

SOLA3 made this same recommendation for Rehoboth's 2020 CDP, which was adopted in 2022 by the City of Rehoboth Beach.



REHOBOTH BEACH STORMWATER UTILITY TASK FORCE

**Jan Konesey, SOLA3 Director and
Representative to Task Force**

In April of 2022, the city of Rehoboth Beach held their first meeting of the newly appointed Storm Water Utility Fee Task Force. In addition to representatives from SOLA3 and Rehoboth Beach Homeowners Association, 11 City residents were appointed by the Mayor and Commissioners. Jay Lagree, a Rehoboth Beach Commissioner, chairs the group. AECOM, an engineering firm, was hired to work with the committee. The purpose of the group is to determine how best to fund necessary storm water projects.

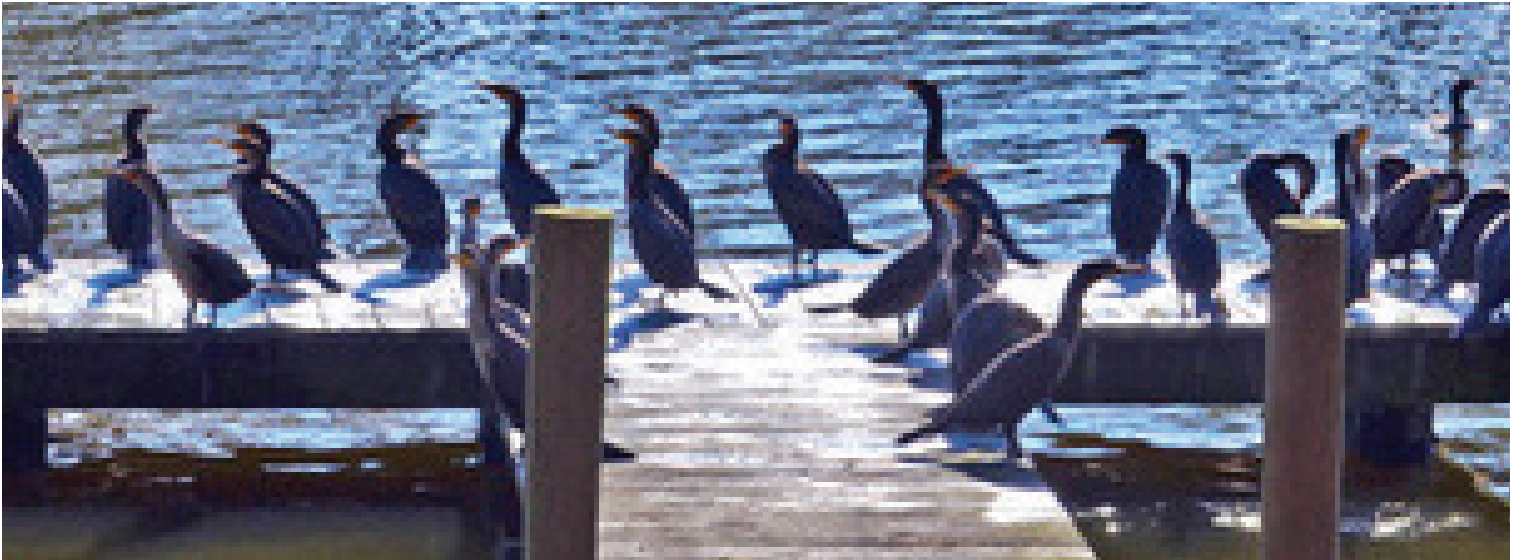
As with similar utility projects, like water and sewer, it's expensive. And like water and sewer, the City would like to fund it with a separate Storm Water Utility fee. The fee would be a separate line item in the budget and cover a large portion of the storm water drain repairs and replacement needs going forward.

Although the committee essentially agreed that the city should adopt a storm water utility fee, there are significant caveats as it does not address other important issues

1. Rehoboth's approved 2010 and 2020 Comprehensive Development Plan includes SOLA3's request for a comprehensive stormwater management plan. It is "comprehensive" because it requires more significant improvements to infrastructure to reduce flooding that will occur from more frequent and severe storms; and can improve water flowing into the lakes and ocean. So far the City has not acted on this provision.

2. The City does not require pervious surfaces for all hardscaping in residential and commercial areas. And despite SOLA3's recommendations, does not use pervious surfaces for its streets and sidewalks. Dewey Beach and many other neighboring communities do, as well as communities around the country. Before a utility fee can be imposed, the City code needs to be amended to require pervious services for all hardscaping.
3. Both Silver Lake and Lake Gerar essentially function as storm water retention ponds for Rehoboth's 40 plus storm drains that flow into these lakes. Data that exists indicates they are polluted with phosphorous and nitrogen and do not meet State standards for dissolved oxygen and bacteria. These issues are not being addressed by the City nor the task force.
4. In addition to the above, before a utility fee can be implemented with expected buy-in from the residents and the business community, a communication plan must be developed and implemented. If one doesn't understand what the overall plan encompasses, and how we will measure success, there is less likely to be support for adopting it.

To follow the continuing activities of the task force, you can find the meeting dates and documents at the City Web site <https://cityofrehoboth.civicweb.net/Portal/MeetingInformation.aspx?Id=1602>.



DELAWARE DROPS THE BALL ON STYROFOAM LEGISLATION

Jan Konesey, Director, SOLA3

The Delaware General Assembly adjourned June 30 without enacting a comprehensive bill that would have banned styrofoam in the State. The bill passed the Senate, but failed to make it to the House agenda. It was opposed by the State Restaurant Association. The Rehoboth Beach Dewey Beach Chamber of Commerce did not take a position. To their credit, it's rare to see a styrofoam take-out from the bulk of our local restaurants.

SOLA3 joined with Plastic Free Delaware, Surfriders and other environmental groups in urging its passage, but was unable to move the House leadership to place it on the agenda. We will all be back next year. Maryland [and ? other states?] implemented a ban several years ago, SOLA3 will continue to work with State and local leaders to implement legislation to protect the safety and health of our communities. We will use our updated email lists to inform you about legislation that impacts our overall environmental health.

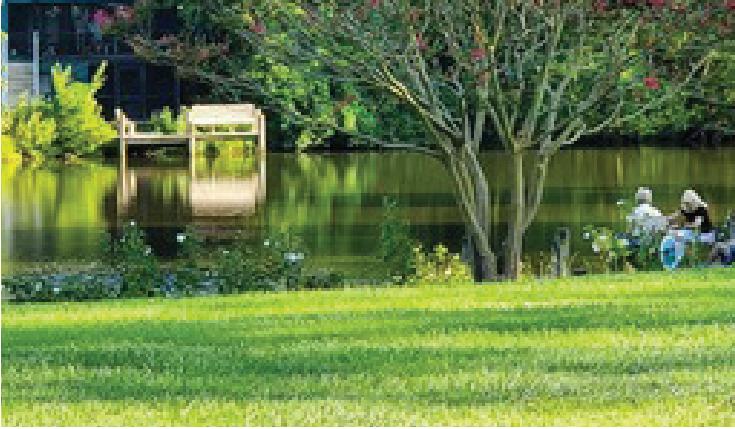
SOLA3 ESTABLISHES RELATIONSHIP WITH DCF

Dan Payne, Director, SOLA3

On Sept 19 2021, SOLA3 officially established and funded the Rehoboth Lakes Fund at the Delaware Community Foundation (DCF).

SOLA's relationship with the DCF is to take advantage of all DCF's resources and help facilitate our outreach to other organizations in Sussex County who have a like-minded vision of preserving our treasured three lakes (Lake Comegys, Lake Gerar, and Silver Lake). We believe our investment in this partnership will give SOLA more visibility, access and exposure to individuals and organizations with like-minded environmental goals.

It has already borne fruit with DCF's help in identifying speakers for our Community Workshop ("Water, Water Everywhere") held at Rehoboth Elementary School on Sept 10. To learn more about DCF or the fund, contact DCF's Vice President for Southern Delaware, Mike DiPaolo at mdipaolo@delcf.org; or go to <https://delcf.org>.



OPPORTUNITY TO BE PART OF UNIVERSITY OF DELAWARE CITIZEN MONITORING PROGRAM

The professional staff of the Sea Grant Division at UDE, located in Lewes, has a program to teach citizens how to monitor water bodies in the State to reveal their conditions. In this case, we are looking for volunteers who would be interested in participating in the program to test Silver Lake, Lake Gerar and Lake Comegys. You would be required to attend their class to learn how to test and then actually do the testing about twice a year. If you are interested, please email saveourlakes3@aol.com.

TREE & GREEN INFRASTRUCTURE COMMITTEE HOSTS PROGRAM ON CREATING A YARD THAT BENEFITS PEOPLE AND THE ENVIRONMENT

Susan Gay, SOLA3 Director; and Member of Rehoboth's Tree and Green Infrastructure Committee

Rehoboth's Trees & Green Infrastructure is responsible for promoting and sponsoring programs not only on the tree canopy but related environmental topics. On October 27, the Committee hosted two expert speakers to address alternatives to standard green grass lawns, and teach homeowners how they can create a different kind of yard that would better benefit both people and the environment.

Dr. Susan Barton, PhD, is an extension specialist and professor in the Plant and Soil Sciences Department at the University of Delaware. She has worked for 20+ years with DeIDOT on roadside vegetation management strategies. She has also worked with partners to develop the Plants for Livable Delaware Program, designed to promote sustainable landscaping.

Tracy Wootten is the University of Delaware Horticulture Agent for Sussex County. She received her B.S. '88 and M.S. '95 from the University of Delaware. Tracy is responsible for homeowner and commercial horticulture education, and helps coordinate the Sussex County Master Gardener program.

Every day, we are losing more of our green spaces to impervious surface and development, with harmful effects on our waterbodies. Dr. Barton showed photos of nicely manicured lawns with a few plantings. She described how they do almost nothing to benefit our environment. It's not that lawns are all bad, but the goal should be to balance the aesthetics traditionally associated with a grass lawn with environmental benefits that come from other types of plants. Dr. Barton described many alternatives. The best designs showed lawns

forming a walkable path through areas with trees, native plants and meadows, all of which provide better water management than a full lawn of grass.

Throughout their presentation, Dr. Barton and Ms. Wootten stressed that landscapes should not be thought of merely as a decoration, but as an ecosystem, providing for clean water, air and pollinators to sustain wildlife, birds, and insects. Our ecosystems need diverse habitats to thrive, and native plants make up those diverse plant communities. Locally, a cleaner environment can greatly benefit our three lakes.

Of course, vast meadows and forested yards are not possible for many people, especially those in the City of Rehoboth Beach, due to the small size of our lots (typically 5000 sq ft). Even in a small yard, you can create a native plant or meadow garden that mimics ecosystems found in nature. Communities across the country are realizing that successful conservation involves less lawn and more native trees and plants. We can do more here in Sussex County as well!





In 2019 the City of Rehoboth adopted an ordinance recommended by SOLA3

to ensure sediment from construction sites is contained and does not enter the City's stormwater system. We also provided a prototype for this sign to be posted at the sites.

PLEASE PROVIDE YOUR EMAIL ADDRESS

If you are receiving this newsletter via USPS, we request that you send your email address to us at saveourlakes3@aol.com to receive future newsletters. Eliminating mailings is beneficial to the environment, saves SOLA3 many hours of our time and the considerable cost for printing, processing and postage. The costs that we save can then be dedicated to important projects that we undertake or sponsor. We consider your email private and guarantee that we will not share it with any other entity. In the event you choose not to, you will continue to receive via USPS.

SOLA3 BOARD OF DIRECTORS

SALLIE FORMAN, Founder/President	2022-24
TOM CHILDERS, Vice President	2021-23
DIANE HANSON, Secretary	2020-22
TREASURER - vacant	2022-24*
SUSAN GAY, Director	2021-23
JAN KONESEY, Director	2020-22
*DAN PAYNE, Director	2022-24

Dan was our very effective treasurer for many years who has resigned from that position to serve as a Director. If you are interested in serving as Treasurer, please email saveourlakes3@aol.com.

SOLA3 PARTNERSHIPS

Rehoboth Beach Homeowners' Association
Draper Subdivision
Lake Comegys HOA

SOLA3 would like to thank:
Peggy Douglas for allowing us to use her amazing photographs in this newsletter.

Sallie Forman was editor of the newsletter, assisted by Susan Gay.

Diane Hanson managed the data base.

SAVING NATURAL TREASURERS Your contributions are critical to our work.

Only through the vital support from our generous community can SOLA3 be successful in accomplishing its mission. The important community-wide projects that we sponsor, such as the recent "Water, Water, Everywhere" workshop, our science, programs with the 5th graders at the Rehoboth Elementary School, our gift to the community of the two bird identification signs installed at Silver Lake Bird Refuge, maintaining our Web site and data base, all require funding.

We have created new opportunities through which you may make donations that can have beneficial tax impact. For example, in addition to direct dollars you can contribute through all of part of you minimum distribution from your IRA, or a contribution of stock, directly to SOLA3. Of course we suggest you consult with your financial or tax advisor for expert advice.



This historic marker at Silver Lake is in recognition of the importance of Silver Lake and Lake Comegys to The Nanticoke tribe, to the war of 1812 and to having the distinction of being the closest natural freshwater lakes to the Atlantic Ocean.