



ANJEC REPORT

Local Environment Matters

WINTER 2021

Inside:

- **Highlights of ANJEC 2020 Environmental Congress**
- **Winners of ANJEC Environmental Achievement Awards**
- **Why stormwater utilities?**



Director's Report

Single-use plastic is unwelcome in NJ

New Jersey is now home to the strongest *Plastic Pollution Reduction Act* in the United States!

When Governor Murphy vetoed the plastic bag ban in 2018, it wasn't clear that this is where we would arrive. The 2018 bill was a bad bill. It was the product of honest efforts to tackle the mounting crisis of plastic pollution by going straight to the New Jersey Legislature. However, the process got hijacked by plastic, oil, and gas industry lobbyists, who out-hustled ANJEC and other environmentalists and pushed through a poorly written, ineffective, do-nothing bill. To his credit, Governor Murphy heard the pleas of environmental advocates and vetoed the bill.

Unfortunately, by the summer of 2018, we were left with less than nothing. We didn't have a plastic pollution law or a viable bill. The industry won the day and life continued with business as usual because the New Jersey Legislature had no appetite to take up another plastic bill after the last one was vetoed.

Then, hundreds of environmental commission (EC) members gathered at ANJEC's 45th annual Environmental Congress. With only two local plastic pollution ordinances adopted, ANJEC posed the challenge for more local action. We developed a model ordinance to address plastic bags, polystyrene food containers and straws. ECs, ANJEC, and allied non-profits gathered by the hundreds over the next year in regional forums at the shore to address ocean impacts, and in Morris and Hunterdon Counties to combat plastic pollution in the Delaware River Watershed.

By April of 2019, we were celebrating 50 local ordinances adopted and closing in on 100 by the end of the year. Senator Bob Smith and Assemblywoman Nancy Pinkin, chairs of their respective Environment Committees, were ready to fight for the cause again. With help from nonprofit experts, informed by local ordinances, and the national collaborative – Plastic Free Waters, of which ANJEC is a founding member – we began drafting a new state-wide bill to reduce single-use plastic and plastic pollution. After many, many meetings with the Governor's office, Speaker Coughlin, Senate President Sweeney, countless legislators and their staffs, the bill was scheduled for votes in both chambers.

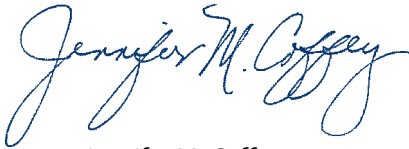
Plastic, oil, and gas industry advocates were unhappy. They lobbied and launched ad campaigns, but they were no match for the 130+ local ordinances that ECs helped adopt to date and the thousands of phone calls and emails that poured into legislators' offices and the Governors' desk from the public demanding action.

The *Plastic Pollution Reduction Act* is a grassroots environmental success story because of you! I am honored to be on your team!

The *Act* will go into effect in May 2022. This phased implementation gives ANJEC, ECs and other advocates time to help restaurants and bars make more sustainable choices as they switch from polystyrene, and to educate consumers about the other aspects of the law. Plastic and paper bags will be banned, with some exceptions for plastic bags used for sanitary reasons, dry cleaning and to wrap newspapers. Small

businesses (under 2,500 sq. ft.) can continue to use paper bags with no fee to customers, as they always have. Polystyrene containers will be banned, with extensions for certain products such as the liner under packaged raw meat. Plastic straws will be available upon request only when dining out, starting November 2021.

Throughout 2021, ANJEC will be publishing more detailed information about the new *Plastic Pollution Reduction Act* and preferred sustainable options. We're also working on strategic next steps, including a bill that will help create marketplaces for recycled materials. We look forward to achieving more environmental progress and protection with you in 2021!



Jennifer M. Coffey
Executive Director

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Local Environment Matters

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565 MUNICIPALITIES ONE ENVIRONMENT

Executive Director Jennifer M. Coffey
Editor Julie Lange Groth

The Association of New Jersey Environmental Commissions is a private, non-profit educational organization serving environmental commission and open space committee members, concerned individuals, non-profits, and local officials. ANJEC's programs aim to promote the public interest in natural resource preservation, sustainable development and reclamation and support environmental commissions and open space committees working with citizens and other non-profit organizations.

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On the cover: Snow Geese in Warren County
Photo by Charlie Fineran

A report from the top on environmental protection in New Jersey

By Julie Lange Groth, ANJEC Report Editor

The featured speaker at ANJEC's 2020 Environmental Congress was Shawn LaTourette, Deputy Commissioner and Chief of Staff, New Jersey Department of Environmental Protection (DEP), who gave a comprehensive presentation on the organization's priorities, goals and accomplishments. But he started with a nod to the extraordinary efforts of his staff and environmental commissions statewide to function in the midst of the COVID-19 pandemic.

"I just want to say how surprising and how encouraging each member of our DEP staff has been throughout this time. I used to say DEP is everywhere. Now I really mean it. They are protecting our environment from kitchen tables and home offices across this State. The DEP staff has done tremendous work in one of the highest pressure times we have ever seen. Much like the taxing of State and local government resources with which I know so many of the participants here today are struggling in lots of ways. I thank you for your commitment."

Protecting drinking water

One of the critical issues the current administration has advanced to protect drinking water is the presence of fluoridated substances. The DEP has identified criteria that will guide the removal of PFOA, PFOS, and PFNA from drinking water supplies.

"New Jersey has led the way in developing nation-setting standards to identify and remediate the presence of fluoridated substances in our drinking water," LaTourette declared.



Shawn LaTourette

"We are working hard to protect public health and to enable other states to follow our lead.

But the new rules have been very hard fought."

He said some industries responsible for generating these chemicals have pushed back against the heightened standards. And municipal suppliers have also expressed concerns that the stricter rules could increase the cost of water.

He stressed the importance of protecting the public, especially children, from the bioaccumulation of these substances that are present "in our environment, in our garbage, even in our blood." LaTourette added that one of the dangerous side effects of this bioaccumulation is a reduced response to vaccines during the pandemic.

Lead in drinking water is also on the Department's to-do list. The Commissioner said they are moving forward with the most aggressive lead pipe replacement program in the country to protect the health of children.

NJ climate initiatives

LaTourette described a broad spectrum of initiatives the State has already under-

taken to tackle the climate crisis, including:

- *Executive Order 89*, a scientific report on climate change;
- *Executive Order 100/Administrative Order 2020-01 – NJ Protecting Against Climate Threats (NJPACT)*;
- The *Energy Master Plan*;
- The *Global Warming Response Act*;
- The Regional Greenhouse Gas Initiative (RGGI).

The Deputy Commissioner also spoke about the Department's efforts to revamp environmental land resource protection regulations to enable development and redevelopment that is safe, sustainable and resilient.

"One of the biggest drivers of this initiative is looking at what we are likely to experience in terms of inundation and flood damage due to sea level rise," he warned, citing recent estimates of an additional one foot of sea level rise by 2030, two feet by 2050, "...and beyond 2050, depending on our mitigation efforts, six feet by 2100."

Among the strategies the DEP is planning to establish is a new regulatory area known as the inundation risk zone, to redefine the tidal flood hazard area to account for sea level rise, and to redefine the fluvial hazard area to anticipate increased precipitation and runoff.

RGGI strategic funding

The DEP, the New Jersey Board of Public Utilities, and New Jersey Economic Development Authority have released the State's first Regional Greenhouse Gas Initiative (RGGI) Strategic Funding Plan for years 2020 through 2022. The Plan identifies the four initiatives in which the agencies will

- invest the RGGI auction proceeds, including:
- catalyzing clean, equitable transportation;
- promoting blue carbon in coastal habitats;
- enhancing forests and urban forests; and
- creating a New Jersey Green Bank.

Offshore wind

LaTourette said Governor Murphy recently released the State's Offshore Wind Strategy, with a goal of 7500 megawatts by 2035.

"It's the right policy," the Deputy Commissioner said. "This is a fight for the future. And it's here. And we all have to get on board. We want to make sure wind is

developed expeditiously from the perspective of our climate goals, but responsibly for all the natural resources we're charged with protecting."

Environmental justice

LaTourette also lauded the "nation's most empowering environmental justice law" passed recently in New Jersey.

"Today we released a guidance document for administering environmental justice through-

out State government," he added. "All environmental commissions in New Jersey should pick up and take a deep read of this document and think about how to bring some of these principles into your work locally. Because environmental justice is a deeply local issue. One of the biggest hurdles to further that promise is often local land use decisions made beyond the reach of DEP's jurisdiction." 🌊

More info

Shawn Latourette's presentation – www.youtube.com/watch?v=ToXwuzht64E&feature=youtu.be

NJDEP priorities

- Reduce and respond to climate change.
- Protect New Jersey's water.
- Revitalize our communities and protect public health.
- Manage and promote thriving natural and historic resources.
- Strengthen DEP.

NJDEP principles

- Follow the law.
- Use the best available science.
- Listen to all sides.
- Find the best balance.
- Be transparent and honest with the public

Judith Enck: Winning the war on single-use plastics

By **Jennifer M. Coffey**, ANJEC Executive Director

Pollution by single-use plastics is a driver of climate change and an environmental justice issue at its core.

Yes, we all know that single-use plastics cause plastic pollution. We know that Americans are enormous consumers of single-use plastics. Foreign countries such as India, Thailand, Indonesia, and China, on which we once relied to take our recyclable plastic materials, are now refusing the onslaught of our waste. We know that the World Economic Forum has compiled data showing that unless we change our behavior and systems, we will have more plastic than fish in our oceans by 2050. Micro and nano plastics have infiltrated our drinking water, particularly bottled water; our food, especially fish and shellfish; and even the air we breathe.

Most of us are just learning, however, that single-use plastics are also a major contributor to climate change, and that the communities that most bear the brunt of the air pollution caused by plastic production are low-income and minority.

During the keynote address at the 47th annual – and first virtual – ANJEC Environmental Congress, Judith Enck showed us the trail from single-use plastics to the climate crisis and the human damage caused along the way.

“Plastic pollution, in fact, is a climate change issue. It’s an ocean issue. It’s an environmental justice issue. It’s an equity issue. It also deals with overconsumption,” Enck told Environmental Congress attendees. “You cannot solve the climate change issue without solving the plastic pollution issue.”

Enck, the founder of Beyond Plastics and former EPA Region 2 Administrator under President Obama, is currently a visiting professor at Bennington College in Vermont. She explained that while most plastic used to be made from chemicals in oil, 99 percent of plastics are now made from ethane, a waste product of the fracking industry. ANJEC staff have indeed testified at New Jersey Senate hearings, where industry representatives have asserted that they rely on the demand for single-use plastics to make the fracking industry so lucrative.

Through a process known as “cracking,” facilities convert ethane waste from fracking into ethylene with high heat, essentially cracking the molecules. The ethylene is then converted into solid plastic and manufactured into single-use utensils, straws, polystyrene and plastic packaging. Enck explained that “these cracking plants are multi-billion dollar facilities designed to keep America stocked



Judith Enck

in single-use plastics. Ethylene cracker plants are being built wherever there are fracking activities, and there are several dozen proposed in the United States at the moment, mostly located in Pennsylvania, West Virginia, Texas, and Louisiana. These facilities emit air toxins like benzene. They also are super emitters of carbon."

Fracking waste that is converted into single-use plastics threatens to undo all of our global progress in reducing greenhouse gas emissions and in fact exacerbates the threats, Enck said. "According to a report by the conservation group Center for International Environmental Law, if plastic production and use grows as is currently planned, by 2030, some 10 years from now, the carbon emissions of these ethane cracker facilities will be equivalent to the carbon released by 295 coal plants. So, as we are working so hard worldwide to get off coal and fossil fuel, these ethane cracker plants are super-emitters of carbon."

Enck continued, "We're moving away from fossil fuel use for electricity generation, and investing in solar, and wind, and geothermal. We're slowly moving towards cleaner transportation choices and more investment in mass transit. So, the fossil fuel industry looks at plastic production as their plan B. And all of this is to just give us cheap plastic and mostly cheap plastic packaging."

Plastic production also compounds existing environmental justice issues. "Plastic production is very much an environmental justice issue. These facilities are almost always sited in low-income communities and communities of color. So in addition to emitting greenhouse gases, they emit benzene, volatile organic compounds, nitrogen oxides, which contribute to smog formation, sulfur dioxide, and a vast amount of particulate pollution," Enck said. "I maintain that if they were located in more affluent communities, they would not have been built. And the companies that are behind these new ethane cracker plants are ...Exxon and Shell, and they view these [low-income and communities of color] as communities of least resistance."

Enck said that despite the challenges, she is optimistic. She advised attendees to first become informed and visit *BeyondPlastics.org*. She encouraged other states to pass plastic bans like New Jersey's plastic trifecta law that bans plastic bags, polystyrene food containers, and makes plastic straws available upon requests. She said that she strongly believes that in NJ what made all the difference was having local laws on the books. So, local environment matters!

The ultimate next step is national action with the US Congress taking up the *Break Free from Plastic Pollution Act* (Senate 3263/ House 5845). This federal bill includes many of the same features as New Jersey's new *Plastic Pollution Reduction Law*. It also mandates extended producer responsibility and creates a national bottle deposit program to dramatically increase recycling rates. 🌊



Environmental Congress presentations may be viewed on ANJEC's YouTube channel, ANJEC Views, at www.youtube.com/channel/UCCEuWtY-juaDStB-22S5SpQ.

Thanks to ANJEC member communities

We are grateful to the thousands of volunteers serving as local officials in more than 260 municipalities and counties that are members of ANJEC. These dedicated people – from municipal and regional environmental commissions and green teams to open space committees, planning boards, governing bodies, shade tree commissions and zoning boards – dedicate their time and efforts to assure a clean environment and high quality of life in their communities throughout our State. Thank you! 🌊

Clean energy roundup

By Sheila Baker Gujral, ANJEC Resource Center

During October's Environmental Congress, ANJEC hosted "New Jersey's Clean Energy Future," featuring: Shawn LaTourette, Deputy Commissioner and Chief of Staff for the New Jersey Department of Environmental Protection (NJDEP); Kelly Mooij, Director of Clean Energy for the New Jersey Board of Public Utilities (BPU); and Gray Russell, Sustainability Officer for the Township of Montclair. The session was sponsored by Ørsted, the company that is building Ocean Wind, a 1.1-gigawatt wind project offshore from Atlantic City.

New Jersey's clean energy future

LaTourette discussed how the 2007 *Global Warming Response Act (GWRA)* informed the 80x50 Report, a newly released NJDEP progress document on the goal of reducing emissions by 80 percent below 2006 levels by 2050 – known as the 80x50 goal.

The goal is necessarily ambitious, LaTourette said. "We're looking at a steep decline over the next thirty years. Doing this requires work across all of our agencies, all of our constituencies, work with the industrial sector, work with the waste sector and how we reduce landfill space, how we deploy food waste digesters, how we work

to diminish the amount of carbon deposition on land that ultimately makes its way into the atmosphere, and how we work with municipalities/local communities to assist them in their carbon sequestration goals."

"If there's nothing else you take away from this presentation, let it be that our 2050

goal is hard to reach. We can do it. I firmly believe that we can get there but it requires transformative change." The transportation sector is responsible for a large portion – 42 percent – of emissions and 70

percent of that is from vehicles. So one of the things the State is working hard on is the EV (electric vehicle) sector and EV adoption throughout NJ.

BPU – a small but mighty agency

Kelly Mooij heads up the Clean Energy Program at the BPU, "a small but mighty agency." The goal of the Program is to educate and change behavior, to provide opportunities for all residents of NJ to reduce energy and lower operating costs for themselves, protect the environment, and lower emissions. To that end, the BPU developed the 2019 *Energy Master Plan*, "our creed, our goal," with support from agencies across State government .

The *Energy Master Plan* sets out a comprehensive road map to meet New Jersey goals through seven strategies:



1. Reduce energy consumption and emissions from the transportation sector.
2. Accelerate deployment of renewable energy and distributed energy resources.
3. Maximize energy efficiency and conservation and reduce peak demand.
4. Reduce energy consumption and emissions in the building sector.
5. Decarbonize and modernize New Jersey's energy systems.
6. Support community energy planning and action with an emphasis on encouraging participation by low- and moderate-income and environmental justice communities.
7. Expand the clean energy innovation economy.

Some of the programs that help us move toward that goal are:

1. Renewable energy (offshore wind, TREC, solar registration, community solar);
2. Specialized energy efficiency (community energy grants, state facility incentives, R&D Energy Tech Hub, workforce development)
3. Commercial and industrial (energy audits, energy efficiency incentives, trade allies)
4. Distributed energy resources (combined power and heat – fuel cells, microgrid development, battery storage, electric vehicles)
5. Residential (new construction, existing homes, energy efficient products, trade allies)

Getting it done

Gray Russell, Montclair's Sustainability Officer for the past nineteen years, is a frequent flyer in the Clean Energy Program and has led Montclair to become a clean energy leader. The three programs he focused on for this presentation were the Renewable Energy Aggregation Program, the electrification of both private and public vehicles, and the BPU Microgrid Pilot Program.

Montclair, along with Maplewood, South Orange, Verona, and Glen Ridge teamed up to procure energy for their towns in an energy aggregation agreement. By combining their bargaining power, they were able to source electricity with 40 percent renewable

content (vs. the usual 20 percent) while still saving customers money on their bills. The five towns estimate that they saved almost \$1.9 million in the first 12 months of the program. The program expires this December, but will start up again in March, and the towns of Livingston and Glen Rock will join in for cleaner and cheaper energy.

As LaTourette pointed out, one of the ways to focus on reducing the greenhouse gases associated with transportation (nearly half of the total) is to "electrify, electrify, electrify." Mooij discussed EVs in the *Energy Master Plan* and the *2020 Electric Vehicle Law*. Russell showed how this worked on the ground level by providing for residential, commercial and municipal electric vehicles in Montclair.

Montclair remains on the State's leading edge in energy practices and is participating in a BPU Microgrid Pilot Program. Having a microgrid addresses energy challenges such as multiple weather-induced power outages and grid security due to cyber-hacking and terrorism.

To hear the presentations in their entirety, go to our "ANJEC Views" YouTube channel for the full webinar and a more extensive list of resources. <https://youtu.be/mwW9NGHcwEg>

Resources:

- Charge Up New Jersey Program – <https://chargeup.njcleanenergy.com/>
- New Jersey's Global Warming Response Act: 80x50 Report – www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf
- New Jersey Energy Master Plan website- www.nj.gov/emp/ (Read the full report at www.bpu.state.nj.us/bpu/pdf/publicnotice/NJBPU_EMP.pdf)
- New Jersey's Clean Energy Program – www.youtube.com/watch?v=JUikROKfQrk, <https://njcleanenergy.com/>
- Township of Montclair Microgrid Study Report – www.state.nj.us/bpu/pdf/energy/Montclair%20Microgrid%20Feasibility%20Study%20+%20Attachments.pdf

ANJEC honors 2020 Environmental Achievement Award winners

By Elizabeth Ritter, ANJEC Deputy Director

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NJEC's 2020 Environmental Congress kicked off with a celebration of accomplishments by environmental commissions (ECs) and nonprofit organizations by awarding our annual Environmental Achievement Awards. The winning projects this year were all the more impressive as local environmentalists had to adjust their plans and programs due to the pandemic.

ANJEC is pleased to honor the following ten groups for their tremendous successes in the face of unforeseen hardships:

"One Thousand Trees"

Berkeley Heights Environmental Commission

Berkeley Heights Township Council Member Susan Poage applied for 1,000 tree seedlings from NJ Department of Environmental Protection (NJDEP) and the Berkeley Heights EC planned on distributing them on Arbor Day in April. Then COVID-19 happened and NJDEP suspended delivery of tree seedlings. Not to be dissuaded, the EC picked up the seedlings themselves and set up a contact-free distribution procedure where more than 160 residents stopped by to pick up seedlings. An additional 400 seedlings were distributed to the fourth grades in town.



Berkeley Heights set up a contact-free distribution procedure where more than 160 residents stopped by to pick up tree seedlings for planting.

"Nature's Best Hope"

Caldwell Environmental Commission

The Caldwell EC has been promoting pollinator gardens for several years. They were planning on offering a workshop accompanied by native plants distribution for Earth Day, but those plans were cancelled during the statewide shutdown. Instead, they got Dr Doug Tallamy, author of *Nature's Best Hope: A New Approach to Conservation that Starts in Your Yard*, to offer a webinar for his new book. His fee was high, so the EC got other groups to sponsor – West Caldwell EC, Kiwanis of West Essex and Morgan Farm of the Cedar Grove Historical Society. Successful promotion for the event resulted in 1,365 registrations for the Zoom presentation.

“10th Anniversary of Cherry Hill Trails Program”

Cherry Hill Environmental Board

With only one trail in existence in 2009, the Cherry Hill trails system has grown to 11 locations with multiple trails at most locations, and has gained the US Department of the Interior’s National Recreational Trail recognition. The Cherry Hill Environmental Board took advantage of the 10th anniversary to market the availability of the trails, educate people about natural life on Open Spaces, and provide opportunities for people to experience and support natural areas and trails. Activities included monthly articles highlighting trails in the Weekly Mayor’s Message, with pictures and information and community service opportunities. There were also educational articles about common wildlife that live in open space areas.

“Cedar Street Beach Dune Restoration Project”

Keyport Borough Environmental Commission

In Keyport, sand was blowing from the dunes into an adjacent park at great inconvenience and expense to the Borough. In an effort to build resiliency from storm surges and preserve their shoreline, the EC employed a “Living Shoreline Policy” that started with dune restoration.

A group of volunteers began by clearing the area of invasive plants. They received help from the Jersey Shore Surfrider Association, consulted with a local ecologist and began plantings in late 2017. They repeated the effort in late 2018. By late 2019, the dunes were climbing and the beach grass was thriving.

“Ditching Disposables”

Lambertville Environmental Commission

Lambertville’s 2018 ordinance banning the use of plastic straws, polystyrene foam and plastic bags by businesses in the City spurred the Ditching Disposables Initiative focused on fueling a culture shift away from single-use plastics. They do this by educating the community, providing residents with a range of easy-to-adopt actions that can help transition away from single use plastics, and reinforcing and celebrating positive changes. The following suite of programs are the result: Sustainable Business Forum, Ditching Disposables reusable bag education campaign, Community Canvassing Day, Repurpose a T-shirt workshop, a sustainability lecture, Sustainability Story Time, plastics ordinance info session & distribution of Ditching Disposables signage to businesses, Sustainable Business Awards, and Green Business Certification.

“Eco House and Garden Tour”

Madison Environmental Commission

The Madison EC organized an Eco House and Garden Tour highlighting energy efficient houses with geothermal heating and cooling, ultra-insulated walls and windows, induction stoves and airtight, energy-saving construction. For

The Madison EC held an Eco House and Garden Tour.



more conventional houses, the tour offered accessible ideas for saving energy, such as solar energy and retrofits. Gardens on the tour showcased both pollinator-friendly native plants and organic vegetables, as well as beehives and chickens. In addition to the tour, the EC offered \$49 discounted energy audits, and sold waste composters and rain barrels. Not only did they show what could be done, but also offered the tools for action.

Natural Resource Inventory Montgomery Township

In 2016, a new environmental commissioner from Montgomery Township attended ANJEC's "Fundamentals for Effective Environmental Commissions" course and went in search of the town's Natural Resources Inventory, or NRI. What he found was a document more than 10 years old using data that (by that point) was 20 years old. The EC prepared their 2018 budget to include partial funding for the NRI and the remaining costs were covered by the Planning Board. In addition, the town's in-house GIS specialist provided mapping for the report, which saved money while enhancing accuracy due to use of township-generated data sets and on-the-ground knowledge. This NRI not only catalogs the natural resources in the municipality, but also identifies over 65 potential projects that will become a work plan for the EC and the Township overall.

"Environmentally Yours" Insightful Articles Wall Township Environmental Advisory Committee

The Wall Township Environmental Advisory Committee (EAC) has developed a series of "Environmentally Yours" articles that are published in the monthly *Wall Township Living* magazine. The list of published articles starting in March 2020 includes: "Who We Are and What We Do;" "Facts on Single Use Plastic Bags – Choose Cloth Bags;" "Green Business Recognition Program;" "Planting Your Own Garden;"

"How and Where to Recycle;" "The Community Park Self-Guided Nature Trail;" "The Wreck Pond Nature Preserve;" and "Conservation and Green Money Saving Tips." The benefits of this series are twofold – residents get some environmental education and the EAC shows its value by offering education and resources to their community.

"Princeton Climate Action Plan (CAP)"


Sustainable Princeton

Sustainable Princeton worked with businesses, subject matter experts, community groups, schools and Princeton University to address climate change while fostering community. In a 16-month effort, an ambitious, community-based plan took shape to reduce emissions 50 percent (from 2010 levels) by 2030, 65 percent by 2040, and 80 percent by 2050 (while pursuing efforts to achieve 100 percent reductions). Over 4,600 community members participated, including 50 who served on a steering committee and five working groups. Over 80 meetings were held to vet and finalize the plan's 84 specific strategies and a draft plan was made available for feedback. To ensure that CAP objectives are actually attained, Sustainable Princeton holds various educational events, such as an "Ask an Expert Series," a "Great Ideas Series," the Green Fest and a farmer's market to share knowledge and reinforce sustainable behaviors community wide. The CAP was adopted by the Princeton Council in July 2019. Specific strategies identified in the Plan have been pursued, including adoption of a Green Building and Environmental Sustainability Element into Princeton's Master Plan, implementation of a Renewable Energy Aggregation Plan which offers Princeton residents access to cleaner energy at a small cost savings, resiliency planning, establishment of a Flood and Stormwater Commission and more.

“Living in Harmony with Nature: the Warren Green Team response to COVID-19”

Warren Township Green Team

The Warren Green Team initiated a series of educational materials and virtual events entitled “Living in Harmony with Nature” in order to promote sustainable practices in the Township during the COVID-19 shutdown. They used social media and the Township website to promote updated, comprehensive resources while people sheltered in place: this resulted in an 1800

percent increase in viewership. In partnership with the Somerset County Library System, they conducted a two-part environmental webinar series for residents, including – “Discover How to Incorporate Healthy Environmental Standards in Your Home and Yard and Why It Matters,” and “Managing Your Environmental Footprint.” They also initiated a food drive and collected over 2,500 pounds of food plus an additional anonymous donation worth \$1,000. 

Save the dates!

2021 Fundamentals for Effective Environmental Commissions

This year ANJEC's annual training will be fully remote and each of four sessions will be offered twice.

Learn best practices for Environmental Commissions (ECs) and hear from ANJEC experts as well as experienced EC members.

- Environmental commission powers and responsibilities
- Developing/updating an ERI/NRI
- Land use planning: The municipal master plan process, municipal ordinances
- Site plan review – *with new remote “hands-on” learning!*
- Networking opportunities – Connect with other EC members around the State.

Session One:

- Saturday, February 27th, 9:30 am
- Tuesday, March 2, 7:00 pm

Session Two

- Saturday, March 6th, 9:30 am
- Tuesday, March 9th, 7:00 pm

Session Three

- Saturday, March 13th, 9:30 am
- Tuesday, March 16th, 7:00 pm

Session Four

- Saturday, March 20th, 9:30 am
- Tuesday, March 23rd, 7:00 pm

ANJEC Members attend for free.

Registration details and more at www.anjec.org.



By **Alex Ambrose**, ANJEC Policy Associate

While ANJEC staff is working from home to keep ourselves and our loved ones safe, our advocacy at the local, state, and federal level has continued in a whirlwind of events. Check out just a few of the accomplishments ANJEC has been privileged to be involved in over the past few months.

Environmental justice is the law in NJ

In the fall issue of the *ANJEC Report*, we reported on the *Environmental Justice Bill*, also known as the *Cumulative Impacts Bill* (S232/A2212). This is a landmark piece of legislation that works to repair the environmental damage caused to communities of color and low-income communities in New Jersey. ANJEC is excited to report that, thanks to the efforts of groups such as Clean Water Action, Ironbound Community Corps and NJ Environmental Justice Alliance, Governor Murphy signed this bill into law in September. Now the strongest environmental justice law in the nation, it requires the New Jersey Department of Environmental Protections (NJDEP) to take into account the cumulative effects of pollution on communities when reviewing applications for new permits or permit renewals. The NJDEP is required to deny the permit if the new project will contribute to the adverse effects of pollution in the community. While this is just the first step towards combating environmental racism in New Jersey, it is an important one.

A knockout punch for plastic pollution

Another landmark piece of legislation – the *Plastic Pollution Reduction Act* – was signed into law recently. This law is the strongest in the country, and a huge blow to the polluting plastic and fossil fuel

industry. It will ban all single-use plastic bags, dramatically reduce single-use paper bags, ban polystyrene food containers and reduce plastic straws.

If your municipality already has an ordinance regulating any of these types of plastics, don't worry; you're allowed to keep yours in place until the implementation date for each of the law's provisions. For plastic bags, paper bags, and polystyrene, that's May 2022, and for plastic straws it's November 2021. ANJEC will be working with the NJDEP, the regulating agency for this law, on education and outreach efforts in the coming months. Keep an eye out for webinars and other educational opportunities from us!

Funding for Delaware River Basin restoration

The Delaware River Basin Restoration Program (DRBRP) is a critical federal program that provides funding for on-the-ground water quality projects in the four Basin states: Delaware, Pennsylvania, New York and New Jersey. The Senate Appropriations Committee released bills recently that maintained the previous level of funding at \$9.7 million. While it is positive that even amidst a pandemic Congress chose to maintain funding levels, the Coalition for the Delaware River Watershed (CDRW), of which ANJEC is a member, will continue to advocate for the full share of \$10 million until the final budget is approved, likely in December 2020.



Associate Professor Daniel Van Abs has been appointed to the NJ Highlands Council

Highlands Council appointment finally approved

The New Jersey Highlands Council is the State planning agency that oversees the New Jersey Highlands region and implements the *Highlands Act*. During his administration, Governor Christie politicized the agency by packing it with his anti-*Highlands Act* allies who voted against the best interests of Highlands residents and natural resources.

ANJEC, along with our friends at the New Jersey Highlands Coalition, have been advocating for the Senate to approve Governor Murphy’s new nominees to the Council. With two appointments still waiting since early 2019, Dr. Dan Van Abs was successfully approved to join the Council in August. Van Abs is an Associate Professor of Professional Practice for Water, Society and Environment at Rutgers University, School of Environmental and Biological Sciences. He is considered one of the preeminent experts on watershed management and water policy in New Jersey, and particularly in the Highlands area, and we are lucky to have him serving on the Council to protect the natural resources in the Highlands.

NJ State budget small grants

Because of the unusual challenges of the pandemic, the State budget process for fiscal year 2021 (July 2020-June 2021) was postponed until the end of September. The Governor’s proposed budget, released in early September, included diversion of \$22 million from the Clean Communities Fund and the State Recycling Fund to pay for Parks Management. While this amount is only a small fraction of the total budget, it helps provide critical grants to local governments, especially ECs, in the fight against plastic pollution by providing recycling and cleanup services.

We are proud to announce that at ANJEC and our partners’ urging, the Legislature amended the final budget to not only end those diversions, but to fully fund all three programs – Clean Communities, State Recycling, and Parks Management – and Governor Murphy has approved this budget. This is a huge accomplishment and demonstrates that the environment remains a priority amid a public health crisis.

New rules for smarter stormwater management


In March 2020, the NJDEP released new rules for stormwater management. One of the biggest changes is that developers are now required to use green infrastructure to manage flooding, pollution, and groundwater recharge. This means instead of relying only on large



This rain garden at Woodstown Borough Hall is an example of green infrastructure required by new stormwater rules in NJ.

concrete basins that foster mosquitos and create eyesores in a neighborhood, developers must now include natural approaches wherever possible, such as small, localized green spaces like rain gardens and swales to manage stormwater. Of course, the NJDEP allows local governments to go further and create stronger protections in their stormwater ordinances, which is why ANJEC and The Watershed Institute teamed up to create an Enhanced

Stormwater Model Ordinance. Municipalities are required to have their new ordinance implemented by March 2, 2021.

While the pandemic rages on, ANJEC is safely ensuring that the environment remains a top priority in New Jersey. As we enter the New Year, our staff will continue to advocate for both public health and the natural resources of our beautiful Garden State. 

ANJEC honored with NJCCC's "Rise to the Challenge" Award

For ANJEC, the pandemic isn't the only crisis in progress. The fight against personal protective equipment (PPE) related litter is just as paramount. Due to the many unknowns caused by this pandemic and with an increase in PPE litter across the state, ANJEC has provided important virtual training for New Jersey Clean Communities coordinators, offering education credits. That is why in November the New Jersey Clean Communities Council (NJCCC) awarded ANJEC its "Rise to the Challenge Award," given to organizations that stepped up to help greatly limit the spread of COVID-19 litter.

"While we all navigated the new normal that came with the pandemic, we just couldn't put this fight against litter on the backburner," said ANJEC Executive Director Jennifer Coffey. "The pandemic provided challenges to plastic pollution as it did with many other things. Yet we were still able to move forward – even in crisis."

NJCCC Executive Director Sandy Huber noted that, "Through its webinars, social media campaigns and other educational efforts, ANJEC has made a major impact in helping communities reduce PPE litter and single-use plastic."

In early spring, as State environmental leaders noticed a stark increase in residents using outdoor spaces, ANJEC made a presentation with Liz Sweedy, Morris County Clean Communities Coordinator. The webinar was titled: "Single-Use Plastics Impact on the Habitat & Waterways." In August, the organization offered clean communities credit hours for another workshop: "Single-Use Plastics and The Pandemic."

ANJEC's online training courses have been watched by more than 1,000 people in 2020, with the number of viewers growing daily. Each webinar is recorded, posted on the organization's YouTube channel and is free to view. Equal access to the proper education is key to the fight against plastic pollution, according to Coffey. She applauded State officials for also not giving up the fight against plastic litter as legislation was signed Nov. 4 prohibiting single-use plastic and paper bags and plastic foam containers. The ban, which goes into effect in May 2022, prohibits the type of bags customers get from restaurants that offer takeout and from groceries and other stores. "This is a phenomenal step in tackling plastic litter in a systematic way but it's not the only step," Coffey said, adding that over the next year, the ANJEC will be hyper-focused on the implementation of this new law. Learn more about the NJCCC at NJClean.org 

Urban zones are hot zones and trees are our #1 defense

By **Randi K. Rothmel**, Ph.D., ANJEC South Jersey Project Director

If the winter months are making you long for summer, just remember that the summer of 2020 was the second hottest on record in New Jersey, with July being the hottest month ever recorded. This continues a long-term warming trend in the Garden State and across the planet as we are more and more affected by climate change.

Urban heat islands are an environmental justice issue

Heat is felt even worse in urbanized areas with a difference upwards of 15 to 20 degrees Fahrenheit compared to surrounding rural areas. Not only are urbanized areas hotter, there is a direct correlation between lower-income neighborhoods and higher temperatures, as shown by several studies, including an on-the-ground project¹ using mobile mapping of street level temperatures, adding extreme heat to the list of environmental social justice issues. A recent spatial analysis study of 108 US urban areas² revealed that 94 percent of the studied areas with elevated land surface

temperatures were in formerly redlined districts (referring to the historical practice of refusing home loans or insurance to whole neighborhoods based on race) compared to non-redlined neighborhoods. The major factor driving the elevated heat was the preponderance of impervious land cover and the lack of tree canopy.

This should come as no surprise, considering three of New Jersey's designated Urban Environmental Justice (EJ) communities – Trenton, Newark, and Camden – have tree canopy cover averages of 12.5 percent, 7.6 percent and 8.1 percent respectively, compared to the overall State canopy coverage of 44 percent. These statistics fall in line with the nationwide trend of tree canopy coverage disparities along racial and income lines.

Mitigating urban heat islands

It has been recognized since the late 1990s that increased vegetation, especially trees, effectively mitigate Urban Heat Island (UHI) effects through shading and evapotranspiration. Properly selected and planted trees can

reduce outside surface temperatures as much as 20 to 40 percent, according to the EPA. A 2004 study³ using the GIS CITYGreen modeling application showed



NJ Tree Foundation planted these street trees in Camden in the fall.

that urban vegetation could both reduce health hazards and effectively reduce energy consumption in UHI areas of Camden and Newark. Heat is the largest weather-related cause of death according to the Centers for Disease Control. Lacking tree canopy in EJ communities is one of many considerations targeted by the NJ Environmental Justice Interagency Council, according to the recently released “Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government.” (www.nj.gov/dep/ejj/docs/furthering-the-promise.pdf).

Philadelphia is putting these findings into practice, announcing last year its intention to launch a 10-year urban forestry plan, an outgrowth of the city’s Greenworks program to achieve a 30 percent tree canopy in every Philadelphia neighborhood. Initial steps are underway with the hiring of a landscape architectural firm to design a plan for some of the more shade-challenged areas of the city.

NJ municipal urban forestry initiatives and opportunities

The New Jersey Tree Foundation (NJTF) has worked since 1998, gradually increasing the tree canopy in underserved communities by putting community residents at the center of their effort – a “transformative experience for the residents and volunteers” according to Lisa Simms, NJTF’s executive director. Of the 257,000 plus trees NJTF has planted statewide, over 10,000 have been installed through their community-based urban programs in underserved neighborhoods of Camden, Newark and Trenton, removing over 2.3 acres of impervious surface. Working only in communities where they are invited, NJTF ensures that residents will care for and protect the trees they help plant. Plans are underway to expand this program to neighborhoods in Gloucester, Jersey City and Atlantic City.

Considerations in Newark, according to Nathaly Agosto Filión, Newark’s Chief Sustainability Officer, include planting more trees on streets where the city owns

the right-of-way. One issue the city has encountered is when developers plant trees but fail to care for them, leading the city to consider adopting rules requiring developers to maintain trees planted for at least a year.

Statewide, grants are available to municipalities for developing their own community forestry management plans (CFMPs) through the NJ Department of Environmental Protection Urban and Community Forestry (NJUCF) Program. Shade tree commissions, environmental commissions and green teams can be involved in this process.

The goal of the NJUCF Program, according to Program Coordinator Carrie Sargeant, is to “engage, educate, and empower local communities to build self-sustaining, local, urban community forestry programs in order to maintain healthy safe and sustainable urban and community forests.”

It is noteworthy that 94 percent of identified EJ communities either currently participate or have previously participated in the NJUCF Program. Through the Program, over \$3 million dollars of grant funding has been awarded since 2015 for implementing CFMPs, resiliency planning (tree inventory, risk assessments), and tree planting. The NJUCF is currently in the process of updating its CFMP guidelines to include assessing the environmental function of trees, such as stormwater mitigation, air pollution mitigation, energy demand reduction, and carbon storage and sequestration.

Tree protection ordinances are another important way that municipalities can protect their tree resources. Ordinances provide clear guidance for planting, maintaining and/or removing trees from streets, parks, and other public spaces as well as activities that are required or prohibited. Establishing a tree escrow fund as part of the ordinance for when trees are removed without being replanted onsite provides another funding mechanism to plant trees in other locations such as UHI-affected areas.

Shade trees are a resource worthy of investing time and money, from planting to stewardship, in order to maximize the ecological benefit, and they’re key to fighting urban heat.

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- 1 Morrison, J. (2019). Can We Turn Down the Temperature on Urban Heat Islands? <https://e360.yale.edu/features/can-we-turn-down-the-temperature-on-urban-heat-islands>
- 2 Hoffman, J.S., Shandas, V., & Pendleton N. (2020). The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas. *Climate* 8(1), 12. <https://doi.org/10.3390/cli8010012>.
- 3 Solecki, W.D., Rosenzweig, C., Parshall, L., Pope, G., Clark, M., Cox, J., & Wiencke, M. (2005). Mitigation of the Heat Island Effect in Urban New Jersey. *Environmental Hazards*, 6, 39-49. www.geo.hunter.cuny.edu/courses/geog702_ibrahim/articles/heat_island_effect.pdf

More Information

- NJ Tree Foundation – <https://njtrees.org/>
NJ DEP Parks and Forestry programs – <https://njtrees.org/>
Urban Forestry Tool Kit – www.vibrantcitieslab.com/toolkit/urban-tree-canopy/
Mapping Tools – ITree (www.itreetools.org/); NJ Forest Adapt (<https://njforestadapt.rutgers.edu/#/splash>); NJ Urban Heat Island Map (www.arcgis.com/home/webmap/viewer.html?webmap=c657fa89169d49e2bfd35cd2b4721225&extent=-74.8549,40.4428,-73.8407,40.9509)

Kaylee DiPasquale wins 2020 ANJEC Lechner Scholarship

By **N. Dini Checko**, ANJEC Resource Center

Kaylee DiPasquale of Howell has won the 2020 ANJEC Lechner Scholarship. DiPasquale is a junior at Rider University majoring in earth sciences with a concentration in marine sciences. She is deeply passionate about clean water and sharing her love for the environment.

During college breaks, DiPasquale works as an Assistant Naturalist at the Manasquan Reservoir Environmental Center where she teaches various nature programs to school-aged groups and the general public. Through her role with Monmouth County Parks, she's been able to learn how the NJ Water Supply Authority treats the water received through the Manasquan watershed for water quality and habitat protection. This job experience also enriches her classroom knowledge as she continues to understand the complexities and the interconnectedness of the natural environment. Every chance she gets, Kaylee enjoys hiking the trail around the reservoir and living her personal motto to "leave only footprints."

ANJEC awards this scholarship biannually in memory of Hermia Lechner, one of the State's foremost conservationists, to honor her commitment to the preservation of open space and natural resources in New Jersey until her death in 1994.



Kaylee DiPasquale

21st Century agriculture is thriving in New Jersey

By Lyle Landon, ANJEC Development Director

As the nation's most densely populated state, calling New Jersey the Garden State may seem ironic. Nevertheless, food and agriculture is our State's third largest industry behind pharmaceuticals and tourism. NJ farms generate more than \$1 billion annually. Although you might not expect it, the nursery/greenhouse/sod industry is the leading commodity group, followed by fruits and vegetables, field crops, poultry, eggs and dairy. Our State produces more than 100 different kinds of fruits and vegetables, and is one of the top 10 producers of blueberries, cranberries, peaches, tomatoes, bell peppers, eggplant, cucumbers, apples, spinach, squash and asparagus. New Jersey growers also produce specialty crops, such as grapes for vineyards, which are a growing segment of the industry.

Despite our urban image, the number of farms and acreage in NJ is actually growing. Having seen the past results of poor farming practices – soil compaction and pollution from stormwater runoff containing manure, chemicals, micro plastics, pesticides and fertilizers – many of today's farmers are taking a different approach. Aiming to produce and sell healthy and delicious products, they are using more environmentally responsible practices – like zero tillage, crop rotation and cover cropping – to increase carbon sequestration and reduce soil erosion, thereby keeping important nutrients in the soil, protecting the environment and tackling climate change.

New Jersey's 9,000+ farms also provide aesthetic and economic benefits. Covering over 720,000+ acres, farms are also the single largest source of scenic vistas in the State, luring residents and tourists to visit and experience their beauty and purchase their fresh products. Driving the growth in the number of farms and acreage in New Jersey are three main factors: farm preservation, favorable legislation and innovative entrepreneurship.

Keeping the Garden State green

The future of agriculture depends on a stable land base. New Jersey's first Farmland Preservation program was created in 1983, and in 1998 citizens voted to amend the State Constitution to dedicate a portion of sales tax revenues to farmland, open space and historic preservation. Today 30 percent of New Jersey's available farmland has been permanently preserved, a higher percentage than in any other state. At the end of 2016 the total acreage preserved was 224,695 acres.

In a farm preservation program, the state buys the development rights for the farmland from the owner, but the farmer retains ownership. Farm preservation is an important investment in our economy and our farming heritage.

Favorable legislation also played a role in the growth of specialty product farming and processing, such as: organic and high-tech farming, vineyards, breweries and distilleries. Organic agriculture is not only the fastest growing segment in New Jersey, but in the nation and worldwide. Consumer demand

Aerofarms in Newark, New Jersey



has grown by over 10 percent annually for more than a decade. The number of natural foods stores has blossomed and now over 70 percent of traditional grocery stores carry organic products.

Becoming a certified organic farm can require more time and money than many smaller farms can afford. New Jersey has 53 organically certified farms, but many more small farms have organically grown products. Community Supported Agriculture (CSA) has helped to support smaller farms using a farm-share subscription model. Classically the boxed shares are delivered for pickup to a central location once every one or two weeks. During COVID-19's lockdown, many grocery stores ran out of produce due to more home cooking and supply chain disruptions. Consumers searched for alternative sources and found CSAs and local farm options. Some local farms added farm stands and home delivery. Thus, a growth in delivery options from farmers and increased consumption (and appreciation) by new consumers have grown the marketplace.

The new face of farming

The high-tech farming segment is also addressing a global food scarcity issue. As more food is needed for a growing population, high-tech hydroponic and aeroponic farmers have reduced the need for acreage, and have added innovative strategies to solve community-based problems. For example, Aerofarms, based in Newark, is addressing an urban food desert challenge for fresh greens while hiring locally and providing training programs, a living wage and benefits.

Fine wines, craft beer and local ingredient-based distilled spirits were not always thriving businesses in New Jersey. Only one

vineyard per million people was allowed by State law, way below the national average! Liberating legislation helped unleash new growth. The *New Jersey Winery Act* of 1981 and subsequent legislation have reduced the required number of acres for a vineyard and the taxes on bottled products. Now there are 52 licensed vineyards in NJ.

Legislation has been a boon for craft breweries too, which have seen 43 percent growth since 2015 in our State. Laws enabling breweries to sell directly to consumers and open tasting rooms led towns to realize the positive economic impacts to tourism, and to welcome these new entrepreneurial businesses. Like craft breweries, craft distilleries are characterized by high-quality, smaller batch sizes and traditional distilling methodologies. The smaller batch size allows distilleries to feature local and seasonal ingredients and display their creativity in naming their products.

To hear from New Jersey farmers and proprietors who use outstanding environmental practices to produce award winning products, watch two free ANJEC videos at www.youtube.com/channel/UCCEuWtY-juaDStB-22S5SpQ. Featured speakers are from Honey Brook Organic Farm, AeroFarms, Villa Milagro Vineyards, Flying Fish Brewing Company and Skunktown Distillery. 💧

Paterson Adopt-a-Catch-Basin program is going strong

By Sheila Baker Gujral, ANJEC Resource Center Director

When it rains, it pours. And floods. And sometimes sewers overflow. Many of us here in New Jersey have a personal history with storms and floods. In addition to increased intensity of weather events, some of our communities have ancient water infrastructure, which wasn't designed for the challenges of high-density, modern-day living.

Take Paterson. The city was founded in 1871 by Alexander Hamilton when he established the Society for Establishing Useful Manufactures, spurring the industrial revolution. Almost 150 years later, Paterson in 2020 has a population of 145,871, is New Jersey's third largest city, and is the eighth most densely populated city in the State. Paterson is also one of twenty communities in New Jersey that are grappling with outdated combined sewer water infrastructure.

Combined sewer systems are more of a challenge than other antiquated water infrastructure because when they are overwhelmed, the excess stormwater is diverted from the sewage treatment facility and piped directly into our waterways. Sometimes the overwhelmed sewage system backs up into basements. While the Paterson municipal government and the Passaic Valley Sewerage Commission (PVSC) are working on their *Long Term Control Plan* (www.nj.gov/dep/dwq/cso-ltcsupmittals.htm) to combat this issue, Paterson's Green Team, along with Sewage Free Streets and Rivers, Rutgers Water Resources, the Great Swamp Watershed Association, and ANJEC, have been hard at work putting together an Adopt-a-Catch-Basin program and training and educating the adopters.

You might say, "It's just water going down the storm drain. What's the big deal?" Well, first of all, the big deal is pollution; it's estimated that more than half of water pollution issues, in fact up to 60 percent, are attributable to stormwater or nonsource pollution.¹ Second, with rain events becoming more frequent and more intense, our aging infrastructure is not prepared to process those storms, resulting in flooding and backed-up sewage. So by simply cleaning and maintaining storm drains or catch basins, you can solve more than half of the water pollution issues AND help defend your homes, businesses, and neighbors from the ravages of flooding and sewage backups.

In August of 2019, Paterson Mayor André Sayegh and Councilwoman Ruby Cotton helped the group kick off the Adopt-a-Catch-Basin program with a community barbeque at Barbour Park in Paterson. In September 2020, the second round was launched at Eastside Park. There are over 60 catch basins adopted already and recruitment is ongoing. You can see a map of all the adopted basins at <https://bit.ly/385xsn4>. If you would like to adopt a catch basin in Paterson, please email patersongreenteam11@gmail.com. 🌊

Additional Information:

Adopt-a-Catch-Basin Kickoff <https://bit.ly/3fPjOTe>

Adopt-a-Catch-Basin Map <https://bit.ly/385xsn4>

1 www.nj.gov/dep/dwq/highway/pdf/HAGuidance.pdf

Stormwater utilities... could 2021 be the year?

By Cheryl Reardon, ANJEC Project Director

We have come to the end of a year that has been filled with challenges to be safe from COVID-19 while we dream of enjoying life without fear once again. Here in New Jersey, our many great water resources offer some respite by providing beautiful places for swimming, fishing, paddling, picnicking and just enjoying the view.

As we enter a New Year with valuable lessons learned about the need to protect ourselves and loved ones, along with the health & safety of our communities, we should also guard our waterways from stormwater pollution and toxins.

When a bloom is not a flower

Climate change has brought us warmer winters with less snow and algae-killing frost, along with warmer and wetter seasons with more severe storm events leading to flooding and excessive runoff into our waterways. This situation, combined with fertilizer runoff from residences and agricultural lands, sewage discharges, and runoff from urban areas and industrial facilities, sets up the perfect conditions for Harmful Algae Blooms (HABs) that destroy habitat, limit recreational access and often close lakes across New Jersey.

A rain garden at Nervine Pond in Bernardsville



In addition to spoiling our fun, HABs are toxic to fish and wildlife, hurt businesses that depend on recreational tourism and contaminate our drinking water. It's important that we begin to make changes now if we want to save our local economies, improve our water quality, and ensure New Jersey's precious water resources are safe and protected for future generations. Effective stormwater management can prevent HABs.

Addressing stormwater runoff

As stormwater runoff flows off of rooftops and parking lots, over lawns, driveways and roadways, into catch basins and through drain pipes and ditches, it picks up toxins, bacteria and other pollutants (gas, motor oil, antifreeze, fertilizers, pesticides and pet droppings). This stormwater runoff is usually not treated and is discharged into local surface waterbodies and groundwater. Communities can be proactive by using a variety of green infrastructure techniques that capture, absorb and naturally filter stormwater runoff at the source. General guidance and resources regarding stormwater runoff are available at www.cleanwaternj.org.

The Clean Stormwater and Flood Reduction Act

In March 2019, Governor Phil Murphy signed into law the *Stormwater Utility Law*, officially known as the *Clean Stormwater and Flood Reduction Act*. This law gives local and county governments and certain utilities the ability to create stormwater utilities. As required under this law, the NJ Department of Environmental Protection (NJDEP) is required to provide guidance on the following stormwater utility topics, along with future updates:

1. Technical assistance for establishing a stormwater utility;¹
2. Establishment of fees and credits;
3. Development of an asset management program for stormwater management systems;
4. Development of guidance for stormwater management related public education and outreach.

Stormwater utilities are widely considered the most effective and equitable

method to fund stormwater management because they follow the “polluters pay” principle. A stormwater utility would raise the funds to pay for green infrastructure projects to manage stormwater by intercepting pollutants before they enter our lakes and water resources.

These funds cannot be diverted to a municipality’s general fund. They are “legally dedicated,” meaning the funds can only go toward stormwater management projects, placing a priority on green infrastructure.

Green infrastructure doesn’t use big pipes or concrete facilities, but rather it mimics the natural flow and hydrology of the land to stop and control the water on site, and lets it percolate into the soil.

1 A stormwater utility assesses fees and uses the revenue from these fees to maintain infrastructure designed to control stormwater flooding and reduce pollutants from entering into waterbodies. According to the Law, the established utility fees must be based on a “fair and equitable approximation of the proportionate contribution of stormwater runoff from real property.”

Although New Jersey has led the way on many fronts over the years to protect water resources, we were behind the times in adopting stormwater utilities. There were already 1,800 stormwater utilities existing across 41 states in the US before NJ’s new stormwater utility tool was created in 2020. With impervious cover and climate change putting stress on our stormwater infrastructure over many years, our State’s problems were compounded by the fact that NJ has

not maintained, upgraded, and replaced old and, in many cases, failing stormwater management systems. A \$40 billion investment is needed over the next 20 years for all of New Jersey’s water infrastructure, with \$16 billion of that amount required for stormwater infrastructure.

In addition to funding needed infrastructure, stormwater utilities also save the taxpayers money. Instead of continuously addressing destruction from


flooding, a steady revenue stream enables communities to prevent damage, protecting property values from being negatively affected due to flooding, wet basements, mold and other problems. Green Infrastructure and wise stormwater planning can also lead to a range of well-paying local green jobs that support local economies.

For more information on building on-the-ground projects that protect against flooding, capture polluted runoff and repair failing infrastructure, visit www.FloodDefenseNJ.org

The new NJDEP Stormwater Guidance website

NJDEP has a new stormwater website offering mayors, town councils, professionals, environmental commissions and permittees stormwater management guidance. The website (www.nj.gov/dep/stormwater/) provides links to technical information, guidance materials, forms, applications, and additional program and resource links.

Let’s make 2021 the year for understanding solutions that are good for our health & safety, our businesses, communities, economy – and our enjoyment!

Please contact the ANJEC Resource Center for more information on stormwater utilities, and stay connected with ANJEC via email (info@anjec.org), on Facebook and on Twitter (@anjectweets) to find out about upcoming educational workshops. 

Acting Locally

By **Randi Rothmel, Ph.D.**, ANJEC South Jersey Project Director;
Isabella Castiglioni, ANJEC Outreach Manager;
Michele Gaynor, ANJEC Resource Center

Bernardsville plants through the pandemic

The Bernardsville Environmental Commission continued their work during the pandemic with the installation of several rain gardens. A 140-sq.-ft.-rain garden installed at the Bernardsville Library in June has the capacity to filter 25,000 gallons of stormwater per year. The work was a collaboration between the Raritan Headwaters Association (RHA), the Bernardsville EC and the Rutgers University Water Resources Program.

Two more rain gardens were installed at Nervine Pond. The Public Works Department has confirmed that the rain gardens are functioning well and, in fact, would support the idea of another garden in the area due to the excessive run-off from Rt.202. The town is also thinking about a second rain garden at the Library in early spring.

EC Member Kristi MacDonald initiated the project. The installations were supported by Mayor Mary Jane Canose and had the cooperation of the Public Works

Department. Chris Obropta from Rutgers contributed valuable engineering, environmental, and cost management resources.

The town considered 12 other potential sites for rain gardens and other Stormwater BMP's on municipal and school properties and places of worship. The library and Nervine Pond were selected as sites because of priority of need and visibility to the public. It is the intent and hope that these rain gardens will be modelled by residents.

One rain garden was partially funded by an ANJEC Open Space Stewardship grant. Through MacDonald's position as science director at the Raritan Headwaters Association, she has developed a close working relationship with Chris Obropta and his team and has been promoting his Impervious Cover Assessments (ICAs) and Reduction Action Plans (RAPs) throughout the watershed. Obropta was asked to partner with Bernardsville and he decided to use

the municipality as one of two "exemplary" projects for how to go about implementing plans for green infrastructure involving multiple partners. Such a great success story!

– Michele Gaynor



*The new rain garden at
Bernardsville Public Library*
Kristi MacDonald

Volunteers learn about mosquito breeding at Hopatcong Cleanup Day

Hopatcong cleans up despite COVID

With good weather and social distancing practices it is possible for ECs to continue their environmental stewardship work, even in the midst of a pandemic. Over the past several years, Hopatcong's Cleanup Day has become a fall event that they do in conjunction with Sussex County (SC) Mosquito Control Program, but due to COVID-19, they were unsure if the event was going to happen in 2020. In September, as the infection rate improved and things slowly opened up, the town decided to go ahead with it. Volunteers were able to borrow the vests and grabbers needed from the SC Clean Communities Program.

In the end, Hopatcong's Cleanup Day was very successful – even more productive than in the past. There were 45 volunteers, fewer than in previous years, but they managed to pick up nearly twice the trash and recyclables. They collected 97 bags of litter for a total of 925 lbs. of recyclables and trash. In addition, they collected 800 lbs. of scrap metal, six tires and a couch.

SC Mosquito Control was able to join the cleanup and delivered a presentation on the role of trash in mosquito breeding, in particular the Zika mosquito, which can breed in small quantities of water trapped in something as small as a bottle cap. This happens to be a problem in the Hopatcong area due to its wetlands.

The feedback from volunteers confirmed it felt great to be outside and productive, and they would be back to do it again next year.

A win for Mansfield

The longstanding Mansfield Township Environmental Commission (EC) in Burlington County will be saved thanks to



its residents. This 21.9-square-mile, agriculturally rich municipality has become one of the latest battlegrounds for warehouse development due to its proximity to the NJ turnpike, Interstates I-95, I-295 and US Routes 206 and 130. Despite environmental concerns noted by the EC and to the dismay of many residents, the Township Committee approved three new warehouse developments and is planning a fourth, paving over large swaths of agricultural land. A previously approved 1.78 million-square-foot distribution center has already been constructed near I-295.

The standoff between residents and town officials came to a head last August with a move by the township to disband the EC by ordinance, despite widespread opposition from residents, stating that the Environmental Commission was "inefficient" and slowed down the development review process. Limits were also placed on public comments including the need to preregister comments prior to the conference meetings via phone. The EC was then replaced with an Environmental Advisory Committee, consisting of one or more people appointed by the mayor to assist or collaborate with the Planning Board in its duties.

Outraged by these actions, Robert Tallon, the ousted EC chair, and Daniel Golenda, a newcomer to Mansfield politics, launched a write-in campaign to unseat Mayor Janice DiGiuseppe and Committeeman Efthimios Tsiknakis. Advocating for more transparency, public engagement and smart development, not "dirty" warehouse development, Tallon and Golenda gained support from the

community and won their election bid, making way for the reestablishment of the Environmental Commission in 2021. Reported by WBNC News, Robert Tallon said “This was in no way anything other than a small victory for an individual candidate, but a large win for people having a voice in their own destiny and protection of the commons, environment, and quality of life.”

– Randi Rothmel

Hoboken sues for climate change damages

Already facing rising sea levels due to climate change, the City of Hoboken has become a leader in resilience, though perhaps more by force than by choice. According to the City of Hoboken’s Office of Sustainability and Resiliency, Hoboken was awarded \$230 million by the US Department of Housing and Urban Development (HUD) in 2013 to implement protective measures against flooding and storm surge. Columbia University’s Sabin Center for Climate Change Law reports that it will take approximately \$500 million to implement the full resiliency plan and adequately mitigate climate change-related damages in the City.

Faced with such a high cost to adapt, Hoboken filed a complaint in September 2020 against Exxon Mobil and other fossil fuel companies with the Supreme Court of NJ. According to the Sabin Center, the fossil

fuel industry “caused climate change-related harms through production of fossil fuels and concealment of fossil fuels’ harms.” The case charges that, while these companies knew about the threats that climate change brings, they ignored the science and continued to peddle a dangerous product. The case has been removed from the NJ Supreme Court and must be pursued through the federal court system, since the majority of the petroleum was produced offshore, on the continental shelf. However, Hoboken is far from the only city facing a steep cost for climate change adaptation. As time passes, we should see more places incorporating resilience and climate change mitigation into their planning. The case continues to be relevant and will be worth watching as it continues to move through the courts.

– Isabella Castiglioni

Cherry Hill sees trail use increase

Cherry Hill reports an increase in trail use in the municipality during the pandemic.

The Environmental Board has made it easy to find a hike on one of the twelve local trails by posting trail maps on the municipal website at www.cherryhill-nj.com/399/Cherry-Hill-Trails. Those trail maps include information about GPS location and which of the trails are ADA accessible, so potential visitors can gauge which trails most suit their needs. After all, if residents don’t know where open space is available, they can’t use it! Thanks to



Chesterfield Township organized a pumpkin composting drive after Halloween in partnership with some student volunteers from SEWA. Residents were glad to leave their discarded pumpkins curbside, where volunteers picked them up and took them to Honey Brook Organic Farm for composting. Residents appreciated that their pumpkins were not going into landfills, according to Chesterfield resident Suruchi Batra.

good planning and communication efforts, Cherry Hill offers residents and visitors plenty of safe, accessible opportunities to get outside.

Many of us can relate: With the pandemic, the outdoors has provided the opportunity to see loved ones more safely, stretch our legs, and get some much-needed sunshine. The increased need for safe, local outdoor recreation opportunities has many

of us either wishing we had better access to open space or finding ourselves thankful for our proximity to undeveloped areas.

Through planning for open space preservation and stewardship, municipalities can provide more outdoor recreation opportunities for residents. Finding ways to let folks know how to access their outdoor resources, as Cherry Hill does, is the next step. — Isabella Castiglioni

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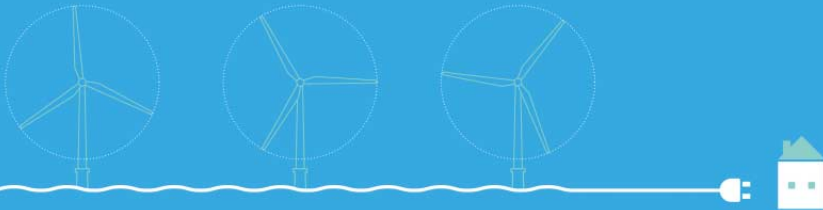
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