



ANJEC REPORT

Local Environment Matters

SPRING 2020

Inside:

- EPA and NJDEP hit 50!
- To-do list for 2020
- The carbon footprint of food waste



Director's Report

New year – renewed plans

The year 2020 loomed throughout my childhood. I had the privilege of growing up with my great-grandmother – my mommom - in my life. She was born in 1908 and told me stories about when women finally won the right to vote and were able to do so for the first time when she was 12. So, throughout my whole childhood, I was very aware that women had the right to vote for less than 100 years, less than the lifespan of my mommom who passed at 93 when I was 24. Whenever I vote, I think of mommom and the century of suffragists before her who fought to give me, you, your mom, your sister, and our daughters the right to vote.

As we honor the 100 years of women voting in the United States this year, we at ANJEC encourage you to make sure you are registered to vote and consider working with the League of Women Voters and other similar organizations to conduct voter registration drives. We also ask you to think about the environmental challenges facing your community and recommit to protecting and restoring our shared environment. We understand that environmental matters can feel overwhelming and that we are all busy, but we're here for you and together we can and have achieved important change.

ANJEC is your resource on a wide variety of environmental matters. I am prioritizing local action on a few issues here to encourage progress where we see that environmental commissions are being most effective, but feel free to call us with your

questions if your biggest concerns aren't listed below.

- **Ending Plastic Pollution:** By now we all know the environmental cost of plastic pollution. The World Economic Forum tells us that if we keep using single-use plastics at the present rate, we'll have more plastic than fish in our oceans by 2050. We know that single-use plastics are an economic boon for the hydrofracking industry because they use ethane, a byproduct of fracking, to create those plastics. We know that global recycling markets are crashing, and we simply have no viable way to recycle most plastic. NJ municipalities have adopted at least 119 local ordinances to reduce single-use plastic and have therefore removed more than a half million plastic bags annually from the waste stream. If your community has not yet adopted an ordinance, please consider doing so. See: <https://anjec.org/action-alerts/> for resources. (page 21)
- **Harmful Algae Blooms (HABs):** HABs closed approximately 40 waterbodies across the State last summer, and eight advisories had not yet been lifted as we went to press. The danger of HABs is the cyanobacteria that live in the algae and produce cyanotoxins. Consumption of water with an HAB designation can make people ill in the form of skin, respiratory, and digestive irritation, and it can be deadly for dogs. The bacteria that cause HABs have been around for 3.5 billion years. The problem is that HABs are growing out of control because of

warmer temperatures and because we're feeding them nitrogen and phosphorus from fertilizers and broken septic and sewer lines. We can better control HABs with improved stormwater and nutrient management.


- o Encourage your community to adopt the new required stormwater ordinance mandating the use of green infrastructure before the March 2021 deadline.
- o Encourage your community to assess whether a stormwater utility is right for your town to provide sustainable funding for green infrastructure that will collect unmanaged stormwater from older developments.
- o Encourage businesses and residents to take a year off from fertilizing their lawns.
- o Stay up-to-date on HAB designations and what your community needs to know at: www.nj.gov/dep/hab/


 Jennifer M. Coffey
 Executive Director

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ANJEC REPORT
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: Hammond's Yellow Spring, a rare wildflower that only blooms in northern New Jersey

Photo by Rick Radis

Don't let that food go to waste!

By Sheila Baker Gujral, ANJEC Resource Center

“Are you going to eat that?” No, it's not your pesky little brother trying to snag your french fries off your plate. It's a scientific response to the huge and growing problem of food loss and food waste.¹ Each year, 40 percent (yes, forty percent!) of all food produced in the US is tossed into the garbage (compared with 30 percent globally). It goes beyond the food we leave on the plate – it's the food we leave in the field, the vegetables rotting on the vine, the unsold fruit and meat at the grocery store and yes, those leftovers at the back of your refrigerator that were too good to throw out...but then you do.

Wasting food is more than just squandered calories – it has a serious climate impact. All of the unused food requires fuel to grow, harvest, process, package, ship and refrigerate. On top of that are the emissions from ruminant² livestock, which emit significant amounts of climate-heating methane during their digestive

process. When food waste is sent to a landfill, it is deprived of oxygen and releases methane, which has a warming effect 56 times that of carbon dioxide.

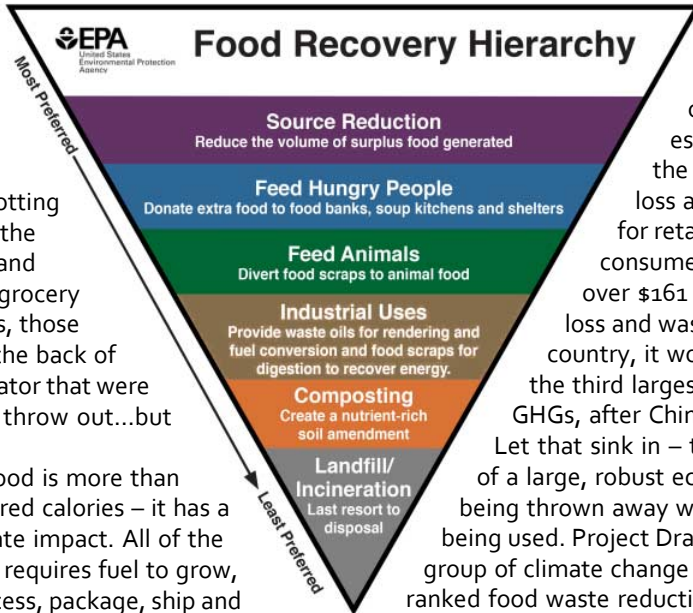
Given a proper chance, food waste can break down into compost, which enriches the soil and helps with carbon capture. The emissions of wasted food add up to nearly 10 percent of all global greenhouse gas

emissions (GHGs).

The US Department of Agriculture estimates that the value of food loss and food waste for retailers and consumers each year is over \$161 billion. If food loss and waste were a country, it would rank as the third largest source of GHGs, after China and the US.

Let that sink in – the equivalent of a large, robust economy is just being thrown away without even being used. Project Drawdown, a group of climate change experts, has ranked food waste reduction as #3 out of 80 action items. Choosing a plant-based diet is #4 on the list, since animal production creates far more greenhouse gasses than crop production.

The carbon footprint of food consists of the greenhouse gas emissions (carbon dioxide, CO₂, Methane, CH₄; nitrous oxide, N₂O; and fluorinated gases) produced by growing, farming, producing, processing, transporting, refrigerating, cooking and disposing of food. While meat is a small contributor to food waste on a volume



¹ Food loss occurs during the production, post-harvest and processing part of the food chain. Food waste occurs at the end of the food chain, during retail and final consumption phase. Both are often referred to together as food waste.

² Cud-chewing animals, specifically herbivorous, even-toed, hooved mammals that have a complex 3- or 4-chambered stomach

basis (Less than 5 percent of total food wastage is meat), its impact on climate change is considerably larger; in fact over 20 percent of the total carbon footprint of food waste is from meat. A serving of beef accounts for 6.61 pounds of CO₂, whereas a serving of legumes only produces 0.11 pounds of CO₂. While switching to a plant-based diet would greatly reduce your carbon footprint, just shifting from beef to chicken could reduce your footprint by 882 pounds of CO₂ annually.

In 2015, the US Department of Agriculture and the Environmental Protection Agency (EPA) announced a national food waste goal of 50 percent reduction by 2030. The EPA developed the Food Recovery Hierarchy (see illustration) to explain ways to handle excess food. The most preferred method is at the top, reducing the volume of surplus food generated, with the least preferred method

being landfill or incineration. In addition to consuming more intentionally, reforms in labeling can help reduce food waste. A great deal of food is being tossed unnecessarily when people misinterpret the “sell by” and “best by” dates as meaning the goods expire on that date, when they are only there to help with stock rotation of goods.

As we went to press, the New Jersey Legislature was working on a bill to combat food waste in our State. After six years of effort, the most recent version (A2371/ s865) passed the NJ Assembly on February 20 and passed the NJ State Senate on March 5. It is now sitting on the Governor’s desk. The bill requires large food waste generators to separate and recycle food waste. A previous version of the bill was conditionally vetoed last summer by Governor Murphy with the recommendation to remove exemptions that would allow food waste to be sent to incinerators or landfills.

Dealing with this issue will have additional impacts beyond cutting food waste and reducing our carbon footprint impact. It is also a great opportunity for job creation. A study by the Institute for Local Self Reliance found that diverting waste to composting would have a positive jobs impact, since composting creates more jobs than landfilling and incineration. In Maryland, composting employs twice as many workers as does landfilling and four times more than incineration. Local composting businesses are poised to take advantage of the economic opportunities while helping reduce the State’s carbon footprint. Hopefully by the time you read this, the bill will have been signed by the Governor and New Jersey will be gearing up for a food waste paradigm shift. 🌱

FOOD WASTE IN THE U.S. IS...

EXCESSIVE

40% OF ALL FOOD PRODUCED IN THE U.S. IS WASTED

133 BILLION POUNDS Food wasted per year. That represents 1,249 calories per person, per day.

EXPENSIVE

\$161 BILLION Uneaten food at retailers, restaurants, and homes costs \$161 billion annually

\$1,500 Per capita, this amounts to over \$1,500 for a family of four

ENVIRONMENTALLY HARMFUL

Food makes up 20% of landfill weight—the single largest municipal waste source

CH₄ CO₂ The methane released by food is a greenhouse gas 21 times more powerful than carbon dioxide

AN OPPORTUNITY

- Diverting 15% of the food that currently goes to waste would be enough to cut the number of food insecure Americans in half
- Food waste can be composted into sustainable soil additives or be used to generate electricity
- Encouraging institutions to purchase so-called “ugly” produce would help farmers find new markets for healthy products that currently go to waste

Goals and opportunities for 2020

By Julie Lange Groth, ANJEC Report Editor


Your environmental commission (EC) probably already has a long list of things to do in 2020 – ongoing projects, annual events, site plan review and lots of meetings. But a new year always offers an opportunity to step back, take stock and consider any important goals you may have overlooked in the rush of more pressing affairs.

This issue of the ANJEC Report is packed with information to help you assess high-priority issues and potential projects for your community in the coming months. Here are a few possibilities to consider:

- Educate municipal officials about the new stormwater utility legislation and the benefits of passing a stormwater utility ordinance in your town. (page 21)
- Launch a public education campaign to discourage single-use plastic pollution and pass an ordinance banning plastic bags, straws and Styrofoam food containers if your town hasn't already done so. As we went to press, about 120 New Jersey municipalities had passed ordinances. (page 20)
- Encourage town officials and local businesses to install electric vehicle-charging stations in public and commercial parking areas. (page 19)
- Urge your municipality to take advantage of new State rebates by greening its fleet with new electric vehicles when it's time to replace existing ones. (page 19)
- Make sure local officials take State-required stormwater management training.
- Recommend installing rain gardens and other green infrastructure on municipal properties to manage stormwater, reduce flooding and protect local water bodies from polluted runoff. (pages 18 and 27)
- Educate residents about invasive species.
- Schedule EC members for ANJEC training webinars, workshops and our Annual Environmental Congress on Oct. 16. (page 22)



Purple-loosestrife is among the invasive plants that ECs can educate residents about.

As always, the ANJEC Resource Center is standing by to help you find useful tools, model projects from towns around the State, sample ordinances and other guidance. Just contact us at info@anjec.org or 973-539-7547. 



By **Michele Gaynor**, ANJEC Resource Center;
John J. Nardone, Commercial Twp. Environmental Commission; and
Jack Branagan, Stillwater Twp. Environmental Commission

Harrington Park offers retailers support with plastic ordinance

The Borough of Harrington Park implemented their comprehensive plastic ordinance this January. It prohibits the commercial use of single-use plastic bags, plastic straws, plastic stirrers and polystyrene foam food packaging containers.

Harrington Park is a small town with a close relationship between town officials and local businesses, schools and houses of worship. In order to help facilitate an easier transition away from single-use plastic products and help merchants comply with this ordinance, the Environmental Commission (EC) researched options for non-plastic substitutes. They mailed a copy of the new ordinance to each business, school and house of worship that would be affected by the new ordinance, along with a letter recommending websites and a list of products that can be used as alternatives to the customary plastics.

Most people supported the ban, according to reports back to the town. The local school district purchased paper straws as an alternative to plastic ones, and students also now have the option of bringing their own reusable straws.

Signaling local support, one house of worship sent out an informative letter to congregants stating that, while it may seem like a hardship to go without their convenient plastic items during Sunday coffees and other gatherings, it is "for the betterment of God's earth" to employ more sustainable practices. Also, the local

dry cleaning business owner, who was exempt from the ban, voluntarily offered reusable garment bags in place of the standard thin-film plastic.

Recommended alternatives listed in the EC's letter to businesses included websites for Greenstaurant (greenstaurant.com), which specializes in eco-friendly disposable items for wholesale food services, and Webstaurant (webstaurantstore.com), which supplies restaurants with reasonably priced straws.

– Michele Gaynor

Towns collaborate for sustainable future talk

The Princeton EC and Sustainable Princeton presented their Climate Action Plan (CAP) at the Madison Community Arts Center in January. The program, Building for a Sustainable Future, was hosted by Madison and Chatham Boroughs and was attended by over 65 people. The intent was to show other municipalities, including mayors and members of land use boards, how to draft a Climate Action Plan.

Also invited were green building experts, such as the contractor and architect of a passive design house in Madison, as well as representatives from Green House Solar and Ciel Power, a company that performs home energy audits. Organizers hope that this collaborative event will be the first of many regional conversations that will help

communities learn and share best practices for tackling common environmental issues.

The CAP is a community plan designed to reduce greenhouse gas emissions and provide local solutions for climate resilience. Princeton's goal is to reduce community-wide carbon emissions 50 percent by 2030, 65 percent by 2040, and 80 percent by 2050 from 2010 levels.

The event stemmed from a presentation at the ANJEC Environmental Congress last October that showed how affordable housing can be built to passive design standards but at conventional costs. The Princeton Climate Plan includes excellent steps for addressing the built environment. Princeton has incorporated their Climate Action Plan into their Master Plan.

www.sustainableprinceton.org/princeton-climate-action-plan/ – Michele Gaynor

The town that benched 6,500 pounds of plastic

Everyone knows that plastic bags are a scourge on the environment. The question is what to do about it. They are not easy to recycle and municipal recycling programs don't accept them. Commercial Township once collected about 1,000 lbs. of bags and turned them into a local recycling program, but then the program stopped taking them. The Environmental Commission has since found a solution that is beneficial to the environment and to the municipality.

The Trex company that makes planks made from a combination of plastic and wood offers a program inviting nonprofit organizations to collect plastic bags and turn them in at an approved location (such as a local department store). If they collect 500 pounds of bags in six months, they can earn a park bench made from Trex material.

The EC decided this was something they wanted to be part of. Cumberland County

Commercial Township's thin-film plastic collection has earned them several Trex benches.



Improvement Authority provided containers and liner bags in which to collect the plastic bags. They installed these at five different locations throughout the township and advertised the program. The collection campaign kicked off with a presentation in a local school, offering a free pizza lunch to the class that collected the most. In no time, the school called and asked to have the bags picked up because they were overrunning the place.

The program turned out to be so popular that within four months the required 500 lbs. of bags had accumulated and Commercial Twp. received its first bench. Once the program proved successful, other local organizations joined the program, again utilizing the containers and liners provided by the County. Two local fire departments, a church and two historical society groups all collected bags and each received a bench.

To date, the EC has installed four benches in its new Veterans' Park and another at a local church. Two more are on hand and waiting to be assembled and an

additional three have been ordered. One of the historical society groups is in the process of earning another bench for their grounds. After providing each bench, Trex allows the town to start working toward another one. The only work the EC has to do is collect the bags when the containers are full and take them to the collection point.

This program has been an unqualified success, enabling Commercial Twp. to keep over 6,500 pounds of plastic bags out of landfills and beautify the community. It has been possible only with the cooperation and support of the County and the enthusiasm of local residents anxious to do their part to help the environment.

– John J. Nardone

Veterans Memorial Park gets a facelift

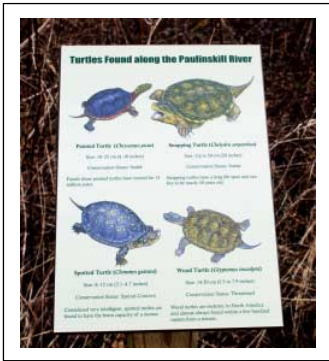
Thanks to a generous grant of \$1500.00 from ANJEC and a Stillwater Clean Communities grant, the Stillwater Environmental Commission was able to hire an outstanding wood-carver/woodworker to make a beautiful two-sided sign that was placed at the entrance to the ball fields at Veterans Memorial Park.

To get to the ball fields, people must cross Trout Brook, a Category One stream. The sign reads WELCOME TO VETERANS PARK. It also identifies the stream and has a carving of a brook trout attached. Additional signage was created by a gifted local artist, depicting the brook snaketail dragonfly (a species of special concern and endemic to Northwestern NJ) and a number of turtles, including the painted turtle, snapping turtle, spotted turtle (species of special concern) and wood turtle (threatened species).

Veterans Memorial Park is 42 acres in size. Ball fields occupy 21 acres and the other 21 acres are left natural, with signs placed along the paths to educate the public about its natural beauty and abundant wildlife. So far, 42 species of birds have been identified in the park. The Stillwater Environmental Commission (STEC) has installed a bat house, six tree swallow nesting boxes, an American kestrel nesting box and a wood duck nesting box placed along the Paulinskill River.

A repurposed shed from the Stillwater Recycling Center has been placed on the ball field side of the park, which STEC members repaired, painted and remodeled to accept co-mingled glass, plastic bottles and aluminum cans. The recycling shed has been a real success story – before it was there, most recyclables were left on the field or placed in trash cans for disposal.

As people leave the ball fields they first pass the recycling shed and can read the reverse side of the sign that says: Thank you for keeping Stillwater litter free.



Above: One of the educational signs created by the Stillwater Environmental Commission, and Right: sign welcomes visitors to Trout Brook

Members of STEC have received many positive comments about the shed, the beautiful signage over Trout Brook and the educational signs placed along the approximately half-mile trail that winds around the natural/preserved side of the park.

– Jack Branagan



New stormwater regulations released!

The New Jersey Department of Environmental Protection (DEP) has released its long-awaited, updated stormwater regulations. The new rules require the use of green infrastructure to manage stormwater. Green infrastructure provides a higher standard of treatment and removes more nitrogen and phosphorus than traditional stormwater basins. This leads to cleaner water in our streams, lakes and rivers.

Highlights of the new rules include:

1. Requirements for Green Infrastructure elements in development projects
 - a. Management of stormwater runoff close to its source
 - b. Drainage area limitations for green infrastructure best management practices (BMPs)
2. Requiring municipalities to update their current stormwater ordinances to comply with these new regulations by March 2, 2021
3. The release of DEP's model ordinance to assist towns in compliance.

ANJEC is committed to offering assistance to municipalities in complying with the new rules. ANJEC is also reviewing the DEP model stormwater ordinance that was released recently and will be offering guidance on options to improve it as appropriate.

Resources:

- The New rules as released by DEP www.nj.gov/dep/rules/adoptions/adopt_20200302a.pdf
- DEP Model Stormwater Ordinance www.nj.gov/dep/stormwater/bmp_manual/NJ_SWBMP_D.pdf

The sprouting of a green revolution

By Julie Lange Groth, ANJEC Report Editor

New Jersey's environmental commissions were the seeds that grew into a statewide environmental movement. By 1970, when the NJ Department of Environmental Protection (DEP) was formed, ANJEC was celebrating its first birthday and dozens of local commissions had already been formed around the State.

The first Earth Day

In 1969 the nation was erupting in protest over the Vietnam War, civil rights and equality for women. Numerous groups had also been rising up to fight against air and water pollution from oil spills, manufacturing, freeways, raw sewage, toxic dumps and pesticides. They demonstrated against the loss of wilderness, destruction of trees and extinction of wildlife species. But individually, their voices were drowned out in a cacophony of dissent.

Then, US Senator Gaylord Nelson from Wisconsin decided to take action. After witnessing the ravages of a massive oil spill



The first Earth Day

in Santa Barbara, CA, he was moved to propose a national day to focus on the health of the environment. He hoped to force environmental protection onto the national political agenda by harnessing the energy of defiance from all around the country.

Nelson teamed up with Republican Congressman Pete McCloskey to launch a "national teach-in on the environment." Recognizing that involving the college crowd would be pivotal to their success, they scheduled the event on April 22, 1970, between spring break and final exams.

It was a phenomenon! With a nationwide staff of 85, they managed to move 20 million Americans to take to the streets (10 percent of the US population at that time.) There were massive rallies all over the country, with

The Cuyahoga River burning in Ohio on 1966





American Cyanamid, in a Linden industrial complex, is estimated to have dumped 3.5 million gallons per year of chemical wastes into the New York Bight from the manufacture of chemicals, insecticides and sulfuric acid.

thousands of protests organized by colleges and universities. In a rare political alignment, they enlisted support from both sides of the political spectrum and diverse segments of the populace, from rich to poor, urban to rural, labor to management.

That first Earth Day led to the formation of the US Environmental Protection Agency by President Richard Nixon. By the following year, Earth Day had expanded into Earth Week and in 1990, it went global, mobilizing 200 million people in 141 countries, paving the way for the United Nations Earth Summit in Rio de Janeiro in 1992.

President Clinton awarded Senator Nelson the Presidential Medal of Freedom for his role as Earth Day founder.

The birth of the EPA

In the wake of the first Earth Day, and with growing public outcry over the deteriorating state of the environment, President Nixon formed an advisory council to consider how to organize federal programs to reduce pollution. Based on the council's recommen-

dations, Nixon sent Congress a plan to consolidate many departmental responsibilities under one federal agency, to be called the Environmental Protection Agency (EPA).

The Senate and House of Representatives approved the reorganization proposal and Nixon signed it on Dec. 2, 1970, appointing William Ruckelshaus as the EPA's first administrator.

Did you know this about the Montreal Protocol?

The Montreal Protocol is a great success story for environmental protection. By restoring the Earth's ozone layer, it positively affected human health, poverty, climate change and the protection of the food chain. Without it:

- The Earth's ozone layer would have collapsed by 2050 with catastrophic consequences.
- There would have been an additional 280 million cases of skin cancer, 1.5 million skin cancer deaths, and 45 million cataracts in the United States.
- The potential intensity of hurricanes and cyclones would have increased three times.
- Our global climate would be at least 25 per cent hotter today.

The Montreal Protocol proves it's possible for nations to come together to solve global environmental problems.

More info at www.nationalgeographic.com/news/2017/09/montreal-protocol-ozone-treaty-30-climate-change-hcfs-hfcs/.

Major EPA milestones

1970 – *The Clean Air Act* is passed, requiring a 90 percent reduction in emissions from new automobiles by 1975.

1972 – The EPA bans the use of DDT, a widely used pesticide found to cause cancer.

1974 – *The Safe Drinking Water Act* is passed.

1980 – Under the new *Superfund Law*, the EPA sets up a nationwide program for toxic waste site cleanups and establishes a list of the most hazardous toxic sites in the US.

1987 – The US joins with 23 nations to sign the Montreal Protocol, pledging to phase out production of chlorofluorocarbons (CFCs) linked to destruction of the Earth's ozone layer. This initiative reverses ozone depletion and is considered a landmark environmental success.

1991 – In the largest environmental criminal damage settlement in history, Exxon agrees to pay \$25 million in fines, \$100 million for restoration work, and \$900 million to set up a remediation fund arising from the 1989 Exxon Valdez oil spill.

1996 – The EPA takes the final step in phase-out of leaded gasoline.

2010 – The EPA and the Department of Transportation's National Highway Traffic Safety Administration set the first national greenhouse gas emissions standards under the *Clean Air Act* by establishing new standards for light-duty vehicles to reduce greenhouse gas emissions and improve fuel economy.

2015 – EPA announces an agreement with the Port Authority of NY/NJ to reduce truck idling at the Port of Newark. 🌊

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! 🌊



EPA researcher conducting air quality research

DEP celebrates 50 years of ACTION!

By Lyle Landon, ANJEC Development Director

The New Jersey Department of Environmental Protection (DEP) was created 50 years ago amid a groundswell of environmental enthusiasm. Important environmental protections had already been enacted, establishing New Jersey as a champion of natural resources.

- In 1954, the State passed the *Pollution Control Act*, setting the framework for air quality monitoring, including motor vehicle emissions inspections.
- Recognizing that NJ was the most densely populated state, citizens took an active role to protect remaining open space by voting for the first *Green Acres Bond Act* in 1961, which provided funding for the preservation of open space and parks.
- John McPhee's 1968 book, *The Pine Barrens*, inspired Governor Brendan Byrne to call a halt on development in the NJ Pinelands, which occupies more than a fifth of the State's landmass and is a critical source of drinking water. This led to the establishment of the *Pinelands Protection Act* in J 1979.

Recognizing that more structure could support more progress and accountability, the State created the DEP on April 22, 1970, the first nationwide Earth Day.

Protecting water

Having addressed environmental issues affecting air and land, New Jersey and the DEP turned to protecting our water. The only State in the Union to be surrounded by water on three sides, New Jersey acted to protect vulnerable coastal wetlands and prevent flooding by passing the *Wetlands Act of 1970*. In 1977 the *Safe Drinking Water*

Act was passed. Many subsequent protections have since been enacted for water quality standards, pollution control, private well testing, etc.

Wildlife protection became a focus with the passage of the *Endangered and Nongame Species Act* in 1973, which was coupled with strong federal laws. Continuing the flurry of legislative protections in the 1970s, the State's solid waste management system was established in 1975, assigning planning and control to counties.

In the 1980s, environmental problems surfaced from old municipal dump closings, so the State directed construction of county landfills and incinerators with modern environmental controls to handle in-county waste. New Jersey was also the first state to require mandatory separation of certain waste material from ordinary trash, known as recycling.

Tackling today's challenges

More recently, the consequences of climate change have hit New Jersey especially hard. The temperature has risen 3.6 degrees since 1895, which is more than in any other state except Alaska. NJ has been referred to as "ground zero" for sea level rise due to the increasing temperatures and the sinking of the tectonic plate that supports the Mid Atlantic Region. With 130 miles of coastland, surging seas and flooding are of great concern to the State's homeowners, vacationers, businesses and the economy in general.

Thanks in part to improved pollution controls on the State's two remaining coal plants and increasing photovoltaic energy sources from solar plants and arrays, New



Wildlife protection became a focus with the passage of the NJ's Endangered and Nongame Species Act in 1973

Jersey is among the 10 lowest states for emissions of climate heating greenhouse gases, including sulfur dioxide, nitrous oxides and carbon. With the signing of NJ's *Global Warming Response Act* last year and the nation's largest wind farm off Atlantic City projected to go online in 2024, New Jersey continues to establish its environmental leadership.

A 50-year partnership

From the very beginning, ANJEC and the DEP have worked hand in glove to address environmental issues throughout the State. When a new environmental law is passed or DEP enacts new rules or regulations, ANJEC often trains local officials and develops community outreach materials to help environmental commissions educate their communities.

With 565 municipalities operating under New Jersey's "home rule" form of government, not all environmental issues can be easily solved at the statewide level. To address local environmental challenges, towns have often turned to ANJEC for help in finding appropriate solutions through master plan changes, ordinances, site plan review and education.

Sometimes the successful efforts of local environmental commissions have led legislators to recognize the need for a new State law. A current example is the widespread pollution created by single-use plastics. Over the past two years, over 119 NJ towns have passed ordinances banning or reducing single-use plastic bags, straws, balloons and polystyrene (Styrofoam),

often with ANJEC's help. Spurred on by municipal action, the State Legislature is currently working on a new plastic pollution law.

Working together with the DEP, ANJEC, municipalities, businesses and the citizens of New Jersey are protecting and restoring our Garden State. Thank you, DEP, for your leadership and partnership, and congratulations on your 50th anniversary! 🌊



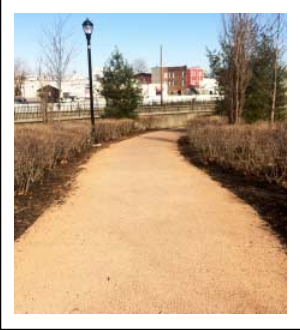
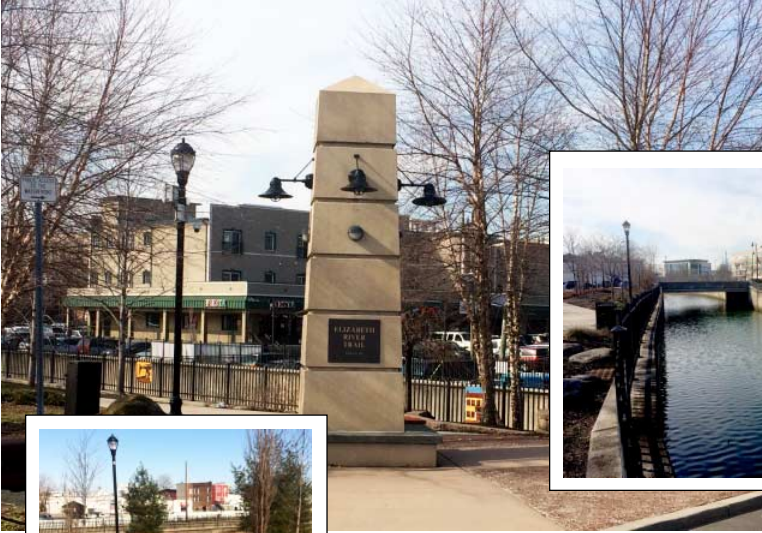
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*The Elizabeth
River Trail*



Managing NJ's urban stormwater

By **Wynniefred Victor Hinds**, ANJEC Community Outreach & Engagement Manager, and **Isabella Castiglioni**, ANJEC Outreach Manager

Many cities throughout the US are projected to be underwater on a regular basis – at risk of flooding at least twenty-six times per year – before the end of the century. In New Jersey, this includes Newark, Jersey City, Garfield, Hoboken, Secaucus, Hackensack, Elizabeth and many nearby cities, including New York City neighborhoods like Coney Island, East Harlem, Rockaway, Red Hook, and downtown Manhattan. Coastal towns in Long Island and the Jersey Shore are also increasingly facing stormwater flooding issues. One only has to recall Superstorm Sandy and scenes of massive floods in places such as New Orleans, Mississippi, Wisconsin and Philadelphia to realize how much devastation can be caused by stormwater flooding.

As one of the most flood-prone states in the country, New Jersey's urban and coastal

cities have had to grapple with that harsh reality by rethinking their Stormwater and Flood Management Long Term Control Plans (page 18). By tackling the causes of these floods, mostly brought on by climate change, these cities have had to come up with more creative approaches and modern mechanics to mitigate and protect their cities from more frequent and extreme flooding disasters. They are pursuing sound and cost-effective solutions to mitigate flooding, save lives, prevent displacement, save money and reduce the overall inconvenience that accompanies flooding.

According to Business Insider, "Cities and institutions can mitigate flood damage by implementing wetlands, levees, and other mechanisms, and many of the cities...have taken steps to implement these measures."

One of the steps being adopted to combat flooding is the integration of green

infrastructure. According to Yale Climate Connections, “Green infrastructure uses projects like rain gardens and porous pavement to store water and slow runoff as it goes into the drainage system... One way to build a little flexibility into a new infrastructure project is to focus on creating many green infrastructure sites rather than one big traditional project like a new tunnel or underground retention chamber.”

“These approaches, like green stormwater infrastructure, that are adaptive in nature are really a priority,” said Julie Rockwell, the manager of Philadelphia Water Department’s Climate Change Adaptation Program.”

Other steps being incorporated are the use of levees and pumping stations.

Practical examples

Elizabeth and Hoboken are two cities in New Jersey that have incorporated these actions into their Long Term Control Plans to solve their combined sewer overflows.

“Hoboken is constantly being flooded, according to Fred Pocci, Authority Engineer at the North Hudson Sewerage Authority (NHSA). “It’s not as bad as it used to be, but 75 percent of Hoboken is in the 100-year flood plane, and I would say about 20 percent of it is at or below mean high tide.” The town incorporated pump stations into the landscape in order to render them “invisible.” Green infrastructure was added to the design to allow it to blend into the background to improve the aesthetics.

The City of Elizabeth took its levees and pumping stations a step further by incorporating them into the Elizabeth River Trail. According to Groundwork Elizabeth, “The Elizabeth River Trail highlights the history of Elizabeth with artwork from local artists displayed along its path. The trail also connects community members to the water by providing accessible biking and walking paths. This mile-and-a-half trail restores some of the natural beauty of the urban waters, which played an important part in Elizabeth’s development as a city, while also acting as an outdoor classroom.”


In the article “Open a window to the river, close a door on flooding,” Daniel Loomis of the City of Elizabeth, John Dening and Kirk Barrett of Mott MacDonald state: “The flood protection system within Elizabeth consists of about 6.8 kilometers of earthen levees and concrete flood walls, four stormwater pumping stations, ten ponding areas, and numerous drainage structures. Following Sandy, the city undertook an aggressive campaign to rehabilitate the entire flood control project, using the original Army Corps plans as a guide...By proactively improving the riverfront, the city enhanced the protection of its residents and rehabilitated drainage structures are functioning as expected.”

Strategies for city governments

If we are serious about saving our cities and helping the residents remain in their homes, then we have to encourage more cities to take action to reduce the impacts of climate change. A report from the Innovation Network for Communities discusses eight strategies city governments have used to finance climate resilience projects. One of the cities highlighted is Hoboken.

In the fourth strategy of the report, “Embed Resilience Standards into Future Infrastructure Investments,” cities are advised to: “Require capital projects to include climate change considerations in planning designs or create and update specific resilient infrastructure standards.”

Governor Murphy signed Executive Order (EO) 89 last October, which creates a Climate and Flood Resilience Program within the NJ Department of Environmental Protection. EO 89 directs all State agencies to take action to integrate climate considerations into planning and decision making.

This creates a wonderful opportunity for planners, designers, decision makers and the public to collaborate on combining and implementing the best strategies for greater resilience, reduced loss and enhanced safety to create more effective and sustainable flood management techniques. 

Green Infrastructure Toolkit



A densely populated state like New Jersey has a huge amount of impervious surfaces, and that can cause serious stormwater runoff problems, such as flooding and degraded water quality. ANJEC has developed two new resource papers to help municipalities plan and implement effective and sustainable stormwater management strategies. These documents can be downloaded from the ANJEC website at www.anjec.org.

Stormwater Management for Municipalities: Green infrastructure designs and options – 12 pages

New Jersey's stormwater rule and Best Management Practices Manual require that new major developments incorporate non-structural stormwater management strategies to the "maximum extent practicable." Also known as green infrastructure (GI), these approaches deal with stormwater onsite instead of channeling it to a different location via pipes. This resource paper explains common types of GI, why it's important, how to implement it and how environmental commissions (ECs) can play a role.

Municipal Techniques: Long term control plans, stream daylighting and combined sewer overflow programs – 16 pages

Many urban NJ communities have aging, combined stormwater and sanitary sewage systems that can't handle heavy rainfalls. This sometimes leads to localized flooding with polluted water overflowing into streets and waterways. This resource paper discusses how to address these issues with green infrastructure solutions, and how to make them part of a Long Term Control Plan. 💧



Green infrastructure helps remove pollutants in stormwater while preventing flooding and replenishing groundwater.

Charging ahead on electric vehicles!

By **Doug O'Malley**, Environment New Jersey Director

In January, Governor Phil Murphy signed the electric vehicle (EV) legislation (S2252/A4819) into State law, joined by legislative leaders and advocates, four days after the State Assembly and Senate passed the legislation. The bill codifies a series of key EV mandates, including:

- meeting obligations under the Advanced Clean Cars Program*;
- building a statewide high-speed EV charging network on major roadways and in downtowns;
- providing rebates of up to \$5,000 when buying an EV; and
- NJ Transit purchasing only electric buses by 2032.

The bill, which was passed on the final day of the New Jersey Legislative session by wide bipartisan margins, went into effect immediately.

The effort to pass the legislation, led by a broad collection of advocates, including the ChargeVC coalition, Jersey Renews, car dealers, electric vehicle charging companies and environmental advocates, makes New Jersey a national leader on EV policy. The bill codifies the goals of the Clean Cars program to get 330,000 EVs on the road by the end of 2025.

A key linchpin of the bill is to provide a “cash on the hood” incentive to spur the purchase of electric vehicles. Consumers

in New Jersey already enjoy a sales tax exemption for EVs, and many models still offer a \$7,500 tax credit, but the legislation would offer a direct cash rebate of up to \$5,000 (based on the battery range) for new electric vehicles priced under \$55,000. This will be the strongest EV rebate in the country and will use \$30 million annually from the Clean Energy Fund for the next decade to fund the rebate.

The legislation sets out benchmarks for both electric vehicle fast chargers (known as Direct Current Fast Current chargers), which can charge EVs as quickly as 15 minutes, and more common Level II


* A set of regulations to control emissions from passenger vehicles, developed in coordination with the US Environmental Protection Agency and National Highway Traffic Safety Administration, which combines the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of regulations – <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>

EV charging station in Secaucus



chargers, which usually take several hours to reach a full charge. The legislation calls for at least 400 fast chargers to be installed across the State in the next 5 years, including 100 locations in downtown areas and 75 along major roadways, and the installation of at least 1,000 Level II chargers across the state, preferably in downtown locations.

The legislation also mandated that by the end of 2024, 10 percent of new NJ Transit bus purchases would be electric, ramping up to 100 percent electric bus purchases by the end of 2032, which would put NJ Transit on par with other major transit agencies that have committed to fully electrifying their bus fleet over the next two decades.

ANJEC is a proud member of the ChargeEV coalition. 

Single-use plastics legislative update

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

January 2020 was the start of a new decade and legislative session. Unfortunately, the Assembly failed to pass the statewide bill banning single-use plastic bags and polystyrene foam food service products (Styrofoam) and limiting plastic straws during the last legislative session. That means it had to be reintroduced in both the Senate and Assembly in the New Year.

The good news is that we accomplished a lot together in a short time to increase awareness about the plastic pollution crisis. In less than two years, NJ residents helped to enact at least 119 municipal ordinances banning single-use plastics and two resolutions by county freeholder boards in support. This has helped tremendously to elevate this issue to the State level.

The current status of the bill (S864/A1978) is that it's passed in the Senate and is awaiting introduction in the Assembly Environment and Solid Waste Committee. Bill language continues to fluctuate with each iteration; right now it stipulates that any store over 2500 square feet must ban single-use plastic and paper bags with an eighteen-month implementation timeline. Styrofoam and straws have a phase-in period of two years and one year respectively.

The two questions ANJEC hears most often are: what's the hold-up and how can I help? On February 23, an unflinching editorial by the *Star-Ledger* Editorial Board commented on how weak State leadership and lobby groups are holding up this bill. (<https://bit.ly/38kdeyB>) Lobby groups are encouraging Speaker Coughlin to look at slightly thicker plastic bags as the solution, but environmentalists know this is not the answer. Why? Because it's substituting plastic for more plastic. As former EPA Regional Director Judith Enck puts it, "The plastic industry wants to keep making plastic bags. And for them, the thicker

the better." Also, in-depth research has shown that dirty Styrofoam is not recyclable.

To help the Speaker realize that lip service about the importance of the bill is not sufficient, please call his office and ask him to pass the strongest legislation possible to protect our public health and local environment at 732-855-7441. And please continue to advocate for local ordinances and active educational campaigns. If it takes 565 ordinances and all 21 county freeholder boards to take action, so be it!



Senator Bob Smith, who has led this effort for nearly a decade, explained: “Everyone’s squishy about it – that makes it hard to get to the finish line. But if we fail on this, shame on us. Shame on the Legislature, shame on everybody.”

Resources

www1.nyc.gov/assets/dsny/docs/2017-05-12FoamDetermination_FINAL.pdf

Stormy outlook for summer 2020

By Elizabeth Ritter, ANJEC Deputy Director

Preventing another HAB season requires controlling stormwater!

Now that spring is here, we can’t help recalling the 2019 Harmful Algal Bloom (HAB) crisis that afflicted many New Jersey lakes. The situation is expected to surface again for the 2020 summer season.

Harmful algal blooms are a natural process. There are records of HABs from early European colonists in the 1500s. However, research points to an increase in the frequency and intensity of algal blooms in modern times due to environmental

changes caused by humans. Examples of human activities that introduce excess amounts of nutrients in our waterways that contribute to HABs include:

- runoff from agriculture and chemically treated lawns,
- dissolved chemicals in rainfall, and
- effluent from sewage or septic systems.

These nutrients are food for algae.

While there are a number of chemicals marketed to control algae (i.e. algaecides), using these while a bloom is in progress is a poor choice. Once an HAB is present, killing it will cause toxins to be released into the water. While the water may look clearer and more inviting for recreation, toxins may still be present in high amounts. Also, use of an algaecide is a temporary treatment of the symptoms, as the blooms will likely return in a matter of days. The best approach to reducing or eliminating blue-green blooms in a lake is to make sure excessive nutrients don’t enter the waterway in the first place.

Stormwater control systems need to be installed, modernized and maintained just like electric grids, gas lines and other public utilities. Stormwater control has never had a dedicated source of State funding and, with many aging infrastructure elements in NJ, the task of upgrading seems insurmountable. A new State law (*The Clean Stormwater and Flood Reduction Act*) passed in 2019, gives municipalities, counties and

other specific groups the authority to establish stormwater utilities.

It is not a tax – no entity is exempt from paying into the utility. *The Act* allows credit for those property owners who reduce the stormwater they add to the system and that credit is ongoing.




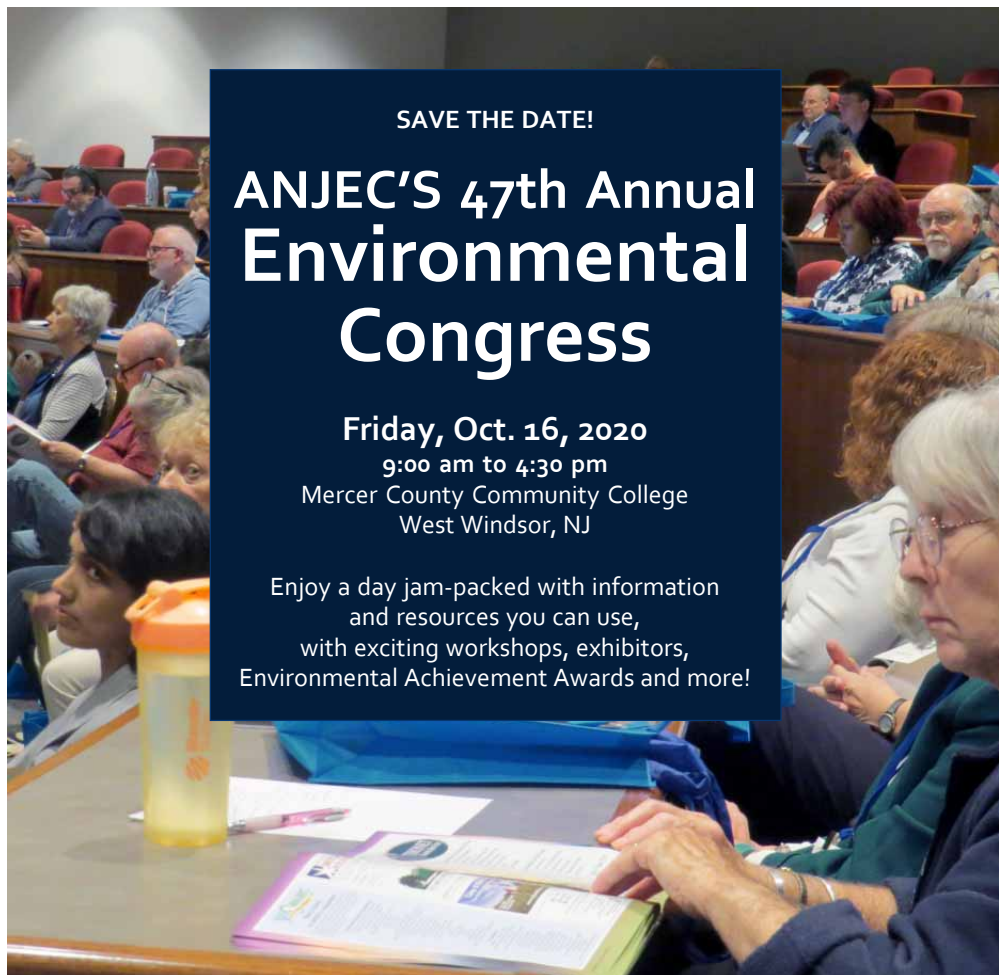
Harmful algal bloom

Small projects like rain gardens or rain barrels can earn property owners a reduction in their payments. Commercial and other public/private property owners can take on bigger projects, like porous pavements, green roofs and larger rain gardens, to reduce the volume of stormwater and therefore, lower their payments to the utility.

The Act requires the NJ Department of Environmental Protection (DEP) to establish an information sharing network. DEP also must provide guidance and technical assistance to set up a stormwater utility, public education, rate-setting and asset management. For more information, check the NJDEP Stormwater Utility site: www.nj.gov/dep/dwq/stormwaterutility.html

Other resources

- DEP HAB Page: www.nj.gov/dep/wms/bfbm/cyanoHABevents.html
- Flood Defense New Jersey: www.njlcvef.org/flood-defense/resources
- Rutgers: <https://njaes.rutgers.edu/environment/>
- New Jersey Future www.njfuture.org/issues/environment-andagriculture/water-sewer/stormwater-utilities/
- An Internet Guide to Financing Stormwater Management: https://cues.rutgers.edu/meadowlands-district-stormwater/pdfs/Doc18_Internet%20guide%20to%20financing%20stormwater%20management.pdf
- Developing a Stormwater Management Utility: https://cues.rutgers.edu/meadowlands-district-stormwater/pdfs/Doc25_Cyre1987_Developing_a_Utility.pdf 



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Mercer County Community College
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Enjoy a day jam-packed with information and resources you can use, with exciting workshops, exhibitors, Environmental Achievement Awards and more!

Should special events be allowed on preserved farmland?

By **Randi K Rothmel**, ANJEC South Jersey Project Director

Even as New Jersey inches toward build-out capacity, agriculture in the Garden State remains the third largest industry, behind pharmaceuticals and tourism. In 2017, the State's more than 9,000 farms generated greater than \$1 billion in revenue. Retaining productive farmland is critically important, not only to provide us with an abundance of locally grown products, but also because farmland plays a crucial role in maintaining open space, keeping New Jersey green and prosperous, and limiting urban sprawl. Still, New Jersey has lost more than 300,000 acres of farms to housing and mixed-use development over the past 40 years. Today, about 730,000 acres of farmland remains, with approximately 230,040 acres permanently preserved under the State Farmland Preservation program.

Preserving a farm

New Jersey's Farmland Preservation Program is administered by the State Agriculture Development Committee (SADC), which coordinates applications and provides funding to County Agriculture Development Boards (CADB), municipal governments and nonprofit organizations for farmland preservation located in Agricultural Development Areas (ADA) that meet certain agricultural quality criteria.

If a farm qualifies, a farmland owner can preserve a farm through the sale or donation of development easements, where the farmer still owns the land but sells the right to develop it for anything other than



agriculture. Farms or development easements acquired through the Farmland Preservation Program are forever protected for agricultural use. When a preserved farm changes ownership, the new owner must comply with the deed restriction, prohibiting nonagricultural development.

Does the Farmland Preservation Program provide enough incentive?

Participation in the Farmland Preservation Program supports New Jersey's agricultural industry by putting farmers at ease with the knowledge that their land will forever be preserved. But are these resources enough to help farmers achieve their personal and financial goals? While there are valuable incentives for landowners to participate in the Farmland Preservation Program, such as providing capital to

- expand existing operations;
- eliminate or reduce debt load; or
- qualify for cost-sharing grants for soil and water conservation projects.

Individual farmers often still struggle to make ends meet.

To further support preserved farms, a pilot program called the *Winery Special Occasion Events Law*, was enacted in 2014 (P.L.2016, ch16) allowing wineries on preserved farmland to conduct special occasion events (SOEs) under certain conditions. All seven wineries that participated in this program saw increases in their 2016 income from sponsoring SOEs, including increased wine sales.

Overall, the SADC 2018 interim report on this pilot program was generally positive, with only a few complaints regarding the size and noise at one or two events. This pilot program has been extended to May 30, 2020.

Moving Special Occasion Events forward on all preserved farms

As part of the pilot program, the SADC is required to submit "recommendations to the Governor and Legislature to amend, extend, or make permanent the program." Recommendations prepared by the SADC SOE Working Group address both preserved and unpreserved farms, Right to Farm protection, and whether and to what extent all farms, not just wineries, should be permitted to hold SOEs. Advocates argue that allowing SOEs would boost the viability of family farms through increased agritourism, leading to higher agricultural production and marketing opportunities.

The SADC's recommendations were circulated among the agricultural community for feedback. SADC staff made presentations to 13 CADBs, the NJ Farm Bureau, the NJ State Board of Agriculture and the NJ Pinelands Commission. Feedback submitted from all the CADBs proposed that all farms should be treated equally with regard to the number of SOEs allowed per year, regardless of the size or production value of the farm, as initially recommended by the SADC. Under this scenario, higher producing farms would be allowed more SOEs per year. Other comments recommended:

- clarifying the definition of a Special Occasion Event;
- streamlining the registration and approval process; and

- allowing for certain infrastructure improvements to accommodate SOEs.

Final recommendations were presented at the SADC's regular meeting in February. Once finalized, they will be made available on the SADC website and will be sent to the Legislature for consideration as they draft/redraft legislation.

To date, the Assembly bill (A2773) sponsored by Vince Mazzeo (District 2) has been introduced in the new legislative session and was approved by the Assembly Agriculture and Natural Resources Committee on February 13. This bill is identical to the 2019 (A5384 and S3393) bill that passed the Legislature but was not signed into law by Governor Murphy last year. It allows for up to 14 SOEs a year on preserved farms unless the farm is located within 200 feet of a residential road or has a residential road as its primary entrance.

Under this circumstance only seven SOEs per year would be allowed. Assemblyman Mazzeo released the following statement: "Farms have so much more to offer their communities besides fresh produce and sprawling open space.... Under this bill, farms will have an opportunity to host these special events to supplement their revenue during good times and bad. Farming is a business, and this initiative makes good business sense."

What does the future hold for Special Occasion Events on preserved farms? Will the Legislature take the SADC report findings into consideration? Stay tuned. In the meantime, you can attend an SADC or local CADB meeting for updates. And do not forget to support your local farmers! Environmental Commissions can help local agriculture by posting information about where Jersey Fresh products are available. 

More resources:

- SADC website – www.nj.gov/agriculture/sadc/index.shtml
- List of CADBs – www.nj.gov/agriculture/sadc/farmpreserve/contacts/cadbs.html
- Follow the Agriculture- Farmland Preservation Legislative updates: www.njleg.state.nj.us/bills/BillsBySubject.asp
- Farming Flourishes in Garden State Special Report (Aug 2019) [Error! Hyperlink reference not valid.](#)
- Jersey Fresh Program – <https://findjerseyfresh.com/>

Guard Your Backyard campaign helps towns combat “dirty dirt”

By Julie Lange Groth, ANJEC Report Editor

The New Jersey Department of Environmental Protection (DEP) has launched a new campaign to help municipalities and communities prevent illegal dumping of fill material – soils trucked in for developments under construction, landscape projects or for use on private residential properties.

At the heart of the program is a dedicated website (www.guardyourbackyard.nj.gov) with local guidance and a model ordinance that municipal leaders can download and modify to suit their local needs. Enacting ordinances can give local governments the authority to determine what kind of fill material may be brought into their communities.

The Guard Your Backyard campaign empowers municipalities and residents with guidance on the steps they can take to ensure the fill used in their communities is clean and safe, according to DEP Commissioner Catherine McCabe. “Establishing local regulations is a first line of defense against municipal dumping and can be quite effective in preventing illegal activity.



NJDEP urges you to "guard your backyard."

We are pleased that many of our local partners have already enacted their own ordinances to build upon DEP’s model ordinance to design the best regulatory solution for their municipality. No one knows the diverse communities of New Jersey better than their local leaders.”

The website and model ordinance are designed to protect communities against a common problem, “clean fill” that is sold or offered free of charge and trucked to residential sites across New Jersey may contain contaminants that should not be on residential property.

The website provides a detailed, easy-to-follow list of what is and isn't considered solid waste under State law; specific actions that can be taken to enforce soil regulations or report illegal dumping; and examples of municipal laws regulating soil.

"Guard Your Backyard provides a detailed list of directives on what the State, municipal officials, industry leaders, private residents and local governments can and cannot do with regard to the dumping of soil," said Paul Baldauf, Interim Assistant Commissioner for Compliance and Enforcement. "Our hope is that towns will embrace the model ordinance and make it their own to control what comes into their towns."

Model ordinance

Under DEP's model ordinance, a property owner receiving soil must first obtain a permit and have the supplier complete some paperwork, such as describing the source of the fill being brought in. The model ordinance makes provisions for fines or other penalties for any violations of a community's ordinance.

"I've been fighting back against illegal dumping and illegal dirt and waste piles throughout New Jersey's Fifth District for several years," U.S. Rep. Josh Gottheimer said. "For decades, New Jersey and its shores have been a notorious dumping ground for other states. I'm glad the State of New Jersey is stepping up to help local authorities protect their communities from these serious environmental and public health threats."


Development of a model ordinance for regulating soil and fill is a key element of Senate Bill 1683, sponsored by Sen. Bob Smith and approved by the New Jersey Senate in June 2019. The legislation has become known as New Jersey's "Dirty Dirt Bill."

Illegal dumping can result in much more than a simple neighborhood nuisance. It creates a public safety crisis that threatens our roads, drinking water, and environment. Lawmakers hope that the new law regulating dirt brokers in NJ will help

prevent situations like one that recently happened in Vernon Township, where an illegal dump grew into a seven-story mountain of contaminated dirt.

"Our communities need to be able to protect their residents, environment, and water sources from contaminants that may be leaking into the ground from dumping sites and dirt piles. And we must continue our efforts to stop unscrupulous activities by dirty dirt brokers, whose criminal behavior comes at the expense of residents living in rural New Jersey," said Vernon Mayor Harry Shortway. "I thank the New Jersey DEP for this work they're doing to support our local communities."

The model ordinance complements existing State laws about fill and is consistent with all Soil Conservation District requirements in New Jersey. It includes exemptions for landscaping work, the filling or fixing of a septic installation, virgin quarry material, or the moving of fill around the same property. In addition, the model ordinance specifically states that it does not apply to soil or fill imported for the purposes of remediation of a contaminated site, operation and/or closure of sanitary landfills, or dredge repository sites.

Guard Your Backyard is part of the DEP's strategy to reduce illegal dumping in multiple forms across the State. In addition to Guard Your Backyard's message for municipal leaders, the DEP encourages New Jersey residents and others to report illegal dumping through its mobile app and "Don't Waste Our Open Space" campaign at <https://stopdumping.nj.gov/>. 

Turning stormwater into a green asset


By Cheryl Reardon, ANJEC Project Director

ANJEC and Rutgers Cooperative Extension (RCE) Water Resources Program are working with environmental commissions, municipalities, schools, libraries and residents on beautiful, sustainable green infrastructure projects throughout New Jersey.

Green infrastructure is designed to keep stormwater from flowing into storm sewers, ultimately polluting streams and other water bodies. Instead, by allowing natural infiltration into groundwater, it helps manage runoff, enhances water quality, alleviates localized flooding and reduces pollution. It also creates beautified green

landscapes using a variety of native shrubs, grasses and flowering plants that provide habitat for native wildlife and are a valuable food source for birds, butterflies, and beneficial insects.

This work is funded by the National Fish & Wildlife Foundation and the William Penn Foundation as part of the Delaware River Watershed Initiative to protect water quality for millions of residents, businesses and wildlife throughout the region.

For more information, check ANJEC's website at www.anjec.org or the Rutgers Cooperative Extension Water Resources Program: www.water.rutgers.edu/ 



1



2



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5



4

① *Preparing the ground for planting at the Vineland Municipal Building*

② *Woodstown Pilesgrove Public Library rain garden*

③ *Rice Elementary School in Evesham*

④ *Students help with*

planting a rain garden at Rice Elementary School in Evesham

⑤ *ANJEC Project Director Randi Rothmel (right) helps with planting at Rice Elementary School in Evesham*

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Friday, July 17, and
Saturday, July 18,
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Join ANJEC and other friends on a sail
on the Hudson River

Details available soon on www.anjec.org

The *Clearwater* – Photo by Anthony Peppone

Got an idea for the *ANJEC Report*?

The *ANJEC Report* welcomes submissions or suggestions from our readers.

- Is there a topic or issue you'd like us to write about?
 - Have you recently completed a project that would be of interest to other local environmentalists?
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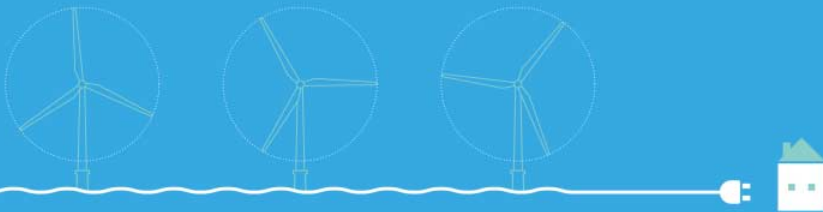
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