



ANJECREPORT

Local Environment Matters

SPRING 2023

Inside:

- Special section – Saving and stewarding open space
- Floating island wetlands: beauty that works
- Agrivoltaics in NJ?





Director's Report

Building bridges in your town

We know that spring is often the busiest season for environmental commissions (ECs), and it brings great opportunity to build new relationships that strengthen your commission and better engage underserved communities in your municipality. As you schedule community cleanup events, get open spaces ready for warmer months, plan Earth Day celebration events and prepare to staff tables at community days and farmers markets, we encourage you to think and act beyond your routine.

Consider reviewing where you have held community cleanups in the past decade. Can you use these events to build relationships by hosting them in different areas of your community? Can you leverage them as opportunities to make new connections with churches, community groups, Scout troops and learn about the priorities and concerns of residents who may feel left out or may not even know the EC exists?

Consider dedicating one or more public meetings to reviewing 'Outside, Together!' – the NJ Department of Environmental Protection's (DEP's) new *State Comprehensive Outdoor Recreation Plan (SCORP)*. Updated every five years, this *Plan* identifies statewide recreation needs and opportunities and sets forth a program to implement measures to address them. The *SCORP* is scheduled to be released this spring and will "inform new funding policies and acquisition prioritization used

by DEP programs: Green Acres, Fish and Wildlife, and Parks, Forestry & Historic Sites," according to the DEP.

Enhanced *SCORP* goals include "furthering equity and environmental justice through outdoor recreation" and "enhancing climate resilience and sustainability through acquisition and recreational development," among other longstanding goals advancing stewardship, conservation and biodiversity (<https://dep.nj.gov/outside-together/>).

A fresh look at open space planning

Meet with community members to consider *SCORP* goals in relation to your municipal open space plan. Advertise the meeting broadly and invite new connections, including leaders from overburdened and underserved communities.


ECs are required to "keep an index of all open areas, publicly or privately owned, including open marshlands, swamps and other wetlands, in order to obtain information on the proper use of such areas, and may from time to time recommend to the planning board or, if none, to the mayor and governing body of the municipality plans and programs for inclusion in a municipal master plan and the development and use of such areas" (NJSA 40:56A-2). Planning for the next round of open space preservation is an excellent way

to build community, elevate voices, learn about environmental, health, and safety concerns, and make strategic recommendations to your governing body.

ANJEC has reaffirmed our commitment to our shared environment, building community, and creating a more just and equitable New Jersey with an update to our mission statement that reflects our service priorities. ANJEC's mission is to "promote local action to protect and restore New Jersey's natural resources and to ensure healthy communities for today and the future. ANJEC advances its mission by engaging in equitable and inclusive practices through leadership, partnerships, education, advocacy for strong public policy and in support of environmental commissions, public officials, and communities throughout New Jersey."



Jennifer M. Coffey (she/her)
Executive Director



ANJEC REPORT
Local Environment Matters

Library Subscription
\$18.00
ISSN 1538-0742

Vol. 43 / No. 2 SPRING 2023

564 MUNICIPALITIES ONE ENVIRONMENT

Executive Director Jennifer M. Coffey
Editor Julie Lange Groth

The mission of ANJEC is to promote local action to protect and restore New Jersey's natural resources and to ensure healthy communities for today and the future. ANJEC advances its mission by engaging in equitable and inclusive practices through leadership, partnerships, education, advocacy for strong public policy, and in support of environmental commissions, public officials, and communities throughout New Jersey.

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On the cover: A black swallowtail butterfly lights on native bee balm growing in a pollinator garden planted by the Cherry Hill Trail Crew
www.cherryhilltrailcrew.com Photo by Mary Ellen Lane

Floating wetland islands:

A sustainable, affordable, effective lake management solution

By **Fred S. Lubnow, PhD** – Senior Technical Director, Ecological Services;
and **Dana Patterson** – Director of Marketing & Communications,
Princeton Hydro

New Jersey lakes are an invaluable resource for clean drinking water, outdoor recreation and agriculture and provide habitat for aquatic flora and fauna. Home to about 1,700 lakes, the Garden State is also the most densely populated state. Excess nutrients from fertilizers, roadway pollutants, overdevelopment and failing septic systems can end up in our lakes and impair water quality. Larger rain events can also cause erosion and stream instability, adding to the influx of excess nutrients to our lakes and ponds. Changes in hydrology, water chemistry, biology and/or physical properties in these complex ecosystems can have cascading consequences that may alter water quality and the surrounding ecosystem. For example, excess nutrients can fuel algal and plant growth in lakes and lead to issues like harmful algal blooms (HABs) or fish kills.

To protect the overall health of local waterbodies, it's important to look beyond just the lake itself. Implementing holistic watershed-based planning is a critical step in managing stormwater runoff, preventing the spread of HABs and maintaining water quality. A watershed management plan defines and addresses existing or future water quality problems from both point and nonpoint sources of pollutants. This approach addresses all the beneficial uses of

a waterbody, the criteria needed to protect its use and strategies to restore water quality or prevent degradation.

When developing a watershed plan, we review all the available tools and recommend a variety of best management practices to prevent nutrients from entering lakes or streams. Options include short- and long-term solutions such as green stormwater infrastructure, stream bank stabilization and stormwater basin retrofits. To reduce nutrient pollution in lakes, one innovative tool in our toolbox is floating wetland islands (FWIs).

How floating wetland islands work

FWIs are a low-cost, effective green infrastructure solution designed to mimic natural wetlands in a sustainable, efficient and powerful way. They improve water quality by:

- assimilating and removing excess nutrients;
- providing valuable ecological habitat for a variety of beneficial species;
- helping mitigate wave and wind erosion impacts;
- providing an aesthetic element; and
- significantly enhancing biodiversity within open freshwater environments.

FWIs are highly effective in a range of waterbodies from big to small, from deep to shallow.

Typically, FWIs consist of a constructed floating mat, usually composed of woven, recycled plastic material, with vegetation planted directly into the material. The islands are then launched into the lake and

¹ U.S. Environmental Protection Agency. 2008. *Handbook for Developing Watershed Plans to Restore and Protect Our Waters*



Lake Hopatcong became the first public lake in New Jersey to install FWIs.

Channel and Ashley Cove were chosen for the installations because they are both fairly shallow and prone to weed growth. The installation of these floating wetland islands is part of a series of water quality initiatives on Lake Hopatcong funded by a NJ Department of Environmental

anchored in place. Once established, they require very little maintenance.

It is estimated that one 250-square-foot FWI has a surface area equal to approximately one acre of natural wetland. These floating ecosystems can remove approximately 10 pounds of phosphorus each year. To put that into perspective, one pound of phosphorus can produce 1,100 pounds of algae each year, so each 250-square-foot of FWI can potentially mitigate up to 11,000 pounds of algae.

In addition to removing phosphorus that can feed nuisance aquatic plant growth and algae, FWIs also provide excellent refuge habitat for beneficial forage fish and can provide protection from shoreline erosion.

Examples of floating wetland islands in action

LAKE HOPATCONG

Princeton Hydro has been working with Lake Hopatcong – New Jersey’s largest Lake – for 30 plus years, restoring the lake, managing the watershed, reducing pollutant loading and addressing invasive aquatic plants and nuisance algal blooms. Back in 2012, Lake Hopatcong became the first public lake in New Jersey to install FWIs.

Last summer, nine more FWIs were installed in the lake with help from staff and volunteers from the Lake Hopatcong Foundation, Lake Hopatcong Commission and Princeton Hydro. The lake’s Landing

Protection (DEP) HAB Grant and 319(h) Grant awarded to the Lake Hopatcong Commission and Lake Hopatcong Foundation.

GREENWOOD LAKE

Princeton Hydro partnered with the Greenwood Lake Commission (GWLC) on a FWI installation in Belcher’s Creek, the lake’s main tributary. The 1,920-acre lake straddles New Jersey and New York, and is a highly valued ecological, economic, and recreational resource. It also serves as a headwater supply of drinking water that flows to the Monksville Reservoir and eventually into the Wanaque Reservoir, where it supplies over three million people with drinking water.

The goal of the FWI Installation was to help decrease total phosphorus loading, improve water quality and create important habitat for beneficial aquatic, insect, bird and

Greenwood Lake is a 1,920-acre waterbody located in both New Jersey and New York.



wildlife species. The project was partially funded by the DEP Water Quality Restoration Grants for Nonpoint Source Pollution under Section 319(h) of the federal *Clean Water Act*. GWLC was awarded one of DEP’s matching grants, which provided \$2 in funding for every \$1 invested by the grant applicant.

HARVEYS LAKE

Measuring 630 plus acres, Harveys Lake is the largest natural lake (by volume) in Pennsylvania and is one of the most heavily used water bodies in the area. It is classified as a high-quality, cold-water fishery habitat (HQ-CWF) and designated for protection. Since 2002, the Borough of Harveys Lake and Harveys Lake Environmental Advisory Council have worked with Princeton Hydro on a variety of lake management efforts focused around maintaining high water quality conditions, strengthening stream banks and shorelines, and managing stormwater runoff.

Five floating wetland islands were installed in Harveys Lake to assimilate and reduce nutrients already in the lake. The islands were placed in areas with high concentrations of nutrients, placed 50 feet from the shoreline, tethered in place with steel cables and anchored.

WESLEY LAKE AND SUNSET LAKE

Working with the Deal Lake Commission (DLC), Princeton Hydro designed and installed 12 FWIs in two lakes in Asbury

Park, NJ. In order to complete the installation of the floating wetland islands, our team worked with the DLC to train and assist over 30 volunteers to plant plugs in the islands and launch them into the two lakes. Our experts helped disseminate knowledge to the volunteers, not only about how to install the FWI, but how they scientifically work to remove excess nutrients from the water. With assistance from Princeton Hydro, DLC acquired the 12 floating islands – six for Wesley Lake and six for Sunset Lake – through a *Clean Water Act* Section 319(h) grant awarded by the DEP.

In addition to the direct environmental benefits of FWIs, the planting events themselves, which usually involve individuals from the local lake communities, have long-lasting positive impacts. When community members come together to help plant FWIs, it gives them a deepened sense of ownership and strengthens their connection to the lake. This, in turn, encourages continued stewardship of the watershed and creates a broader awareness of how human behaviors impact the lake and its water quality.

Real water quality improvements begin at the watershed level with how people treat their land. For more information on watershed planning or installing FWIs in your community, feel free to reach out to Princeton Hydro directly at info@princetonhydro.com. 



Working with the Deal Lake Commission, Princeton Hydro designed and installed 12 floating wetland islands in two lakes in Asbury Park.

Acting Locally



By **Georgia Madiba**, ANJEC Membership Manager;
Michele Gaynor, ANJEC Resource Center;
Stephen T Carroll, ANJEC volunteer;
and **Jack McCausland**, ANJEC Water Outreach Specialist



During the COVID 19 pandemic in 2020, the Roselle Park Community Garden converted to growing “farm style” rather than individual bed rentals.

Community gardens fill local needs

Is your Environmental Commission (EC) planning on building or revitalizing a community garden in your town? The past year's successes of the Borough of Roselle Park and Township of Edison provide inspiration for the management of robust community garden rentals where a portion of the beds are set aside to donate to those in need of fresh produce.

About five years old, Roselle Park's community garden has been funded by various grants. It houses 30 beds for rent from May through October, with an additional five large-sized beds planted for donation. These "market beds," as current EC Chair and Community Garden Manager Tim Coakley fondly refers to them, harvested about 100 pounds of fresh produce during the 2022 season. Cucumbers, peppers, kale, lettuces and tomatoes were either brought to the Casano Community

Center for distribution to senior citizens, or advertised on the garden's social media for pickup on Coakley's front porch. Roselle Park's community garden serves a need in the community for those that have the time and energy to tend to beds, as well as for those who do not.

Plans for Edison's community garden program began in the months right before the Covid 19 pandemic, and after in-person meetings were prohibited, they continued in a virtual format. The founding members of the Edison Community Garden Initiative (ECGI), a part of the nonprofit Beautiful Edison, persisted with their plans until they were accepted in early 2022, Sally Yabra, Environmental Commissioner and ECGI member explained. Funded and built by the Township, 40 garden beds were constructed in early 2022 at Thomas Swales Park, with an official opening in August. As

part of the original plan, five additional beds were set aside to specifically grow for the Hands of Hope food pantry located across the street. ECGI manages the garden and looks forward to a full season in 2023, where they will be able to donate loads of fresh vegetables to the food pantry. They hope to expand by building more community gardens within the Township.

More info

- Borough of Roselle Park Environmental Commission FB: @RPEnvironmentalCommission email: environmentalcommissionrp@gmail.com
- Township of Edison Environmental Commission FB: @EdisonNJEnvironmentalCommission
- Edison Community Garden Initiative (ECGI) edisoncommunitygardens.org

– Georgia Madiba

Historic Salem Oak planted in Somerville

In June of 2019, the historic Salem Oak tree, which stood on the grounds of the Salem Religious Society of Friends for nearly 600 years, uprooted and fell. It was the oldest and largest white oak tree in NJ, standing just over 100 feet tall with a trunk circumference of approximately 22 feet and a crown span of 104 feet. According to legend, Quaker John Fenwick, founder of

Salem, NJ, met with Lenni Lenape Native Americans and brokered a peace treaty under the oak’s branches in 1675.

Before the tree’s collapse, the NJ Department of Environmental Protection (DEP) Forest Service’s Big and Heritage Tree Conservation Program collected acorns at the base of the tree and propagated seedlings at the NJ Forest Service Nursery.

The DEP made one seedling available to every town in the State from the 1,200 seedlings developed. The Somerville Environmental Commission collaborated with Paul Soltis, the resource interpretive specialist for the Wallace House and Old Dutch Parsonage in Somerville, George Washington’s winter headquarters during the Middlebrook Cantonment (1778-1779). The EC received permission to plant one of the seedlings on this historic site and, once digging began, several artifacts were discovered.

The formal program and planting of the seedling during the Somerset County Journey Through the Past happened on October 9, 2022, and involved the community, including the local Girl Scout troop, songs by a Somerville middle school choir, an original poetry reading by a member of the EC and the seedling planting by Mayor Dennis Sullivan.

In a plot that served as the facility’s herb garden during the 1700s, the EC cultivated and dried herbs during the summer and displayed them on a wooden drying rack with information extolling their healing properties, their flavoring qualities and their beauty.

– Michele Gaynor



The Somerville EC plants a seedling from the Salem Oak Tree.

Egg Harbor City rejects redevelopment plan/proposal

Approximately 150 years ago Egg Harbor City received by deed a grant of a 400-acre plot of land (the Area), which included Pine Barrens woodlands, wetlands and a lake. The deed specifically required that the Area was “forever to remain public.” The Area is

now called Egg Harbor City Lake Park. Since the original grant the Area has been used only for public purposes, such as swimming, tent and trailer camping, fishing, canoeing, picnicking, playing miniature golf and other activities.

TackleDirect, a fishing and tackle retail company located in Egg Harbor Township, asked the City to consider a proposal to permit the company to redevelop a 48-acre portion of the Area as a warehouse and storefront. This project could not be approved, however, because of the "forever public" restriction of the deed; it could only be executed if the Area were redefined as an area in need of redevelopment (ARN). The City Council directed the Land Use Board to study the issue. In November 2021 the Board reported that blocks of the Area could be designated as an ARN and the City Council supported that designation.

Community resistance soon followed. The Pinelands Preservation Alliance (PPA) was an active participant. It organized a petition effort that generated over 2400 signatures. PPA performed legal analysis, which raised significant questions about the City's rationale supporting the ARN determination. Its comment letter to the city (see: [https://pinelandsalliance.org/wp-](https://pinelandsalliance.org/wp-content/uploads/2021/12/2021-12-15-PPA-Comments-Council-Meeting-re-EHC-Park.pdf)

[content/uploads/2021/12/2021-12-15-PPA-Comments-Council-Meeting-re-EHC-Park.pdf](https://pinelandsalliance.org/wp-content/uploads/2021/12/2021-12-15-PPA-Comments-Council-Meeting-re-EHC-Park.pdf)) is too lengthy to discuss here, but is recommended reading for planning board members, environmental commissioners and elected officers who may have to deal with ARNs.

Community reaction steadily increased. The location of the public hearing scheduled for December 15 was moved from the municipal building to a school to accommodate a larger crowd. Even the school couldn't hold all who showed up. About 100 people filled the cafeteria, 20 of them speaking in opposition to the project. The Council recognized the community support for retaining the land as public space and rescinded the ARN. — *Stephen T. Carroll*

Ila Vassallo named Sustainable Jersey's Sustainability Hero

Ila Vassallo, chair of the Evesham Environmental Commission/Green Team for the past 10 years, was named Sustainable Jersey's Sustainability Hero last August. Ila has been involved in advancing Evesham's environmental stewardship since 2006 when she worked with her local assemblyman to get a bill passed allowing homeowners to place solar panels on their roofs after being previously denied by her homeowners' association for installation on her own home. Since then, she has accomplished numerous victories in Evesham as part of the EC, including: the adoption of a green development checklist, requiring developers to consider their environmental impact before building; the passage of a stormwater control ordinance more stringent than required by the State; and the development of a management plan for a local parcel of land – to name a few.

Ila says, "ANJEC is the go-to source for the Evesham Environmental Commission. The staff and resources at ANJEC help our environmental commission excel in our environmental efforts." — *Jack McCausland*

Thanks to ANJEC member communities

We are grateful to the thousands of volunteers serving as local officials in more than 300 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! 🍀

Protecting and stewarding New Jersey's open space

An interview with Jay Watson of NJ Conservation Foundation

New Jersey is the fifth-smallest state in the US, but it tops the charts in the number of people per square mile. Despite being the most densely populated – or perhaps because of it – New Jersey is among the nation's leaders in land preservation.

Thanks to preservation programs, about a third of the land area in our compact-yet-diverse State has been permanently protected. Another third has been developed, while the fate of the remaining third is yet to be decided.

The encouraging news is that open space and farmland preservation are extremely popular with Garden State residents. Since the founding of NJ's Green Acres Program in 1961, all 14 statewide open space ballot questions were overwhelmingly passed by voters. The last was in 2014, when voters created a permanent, dedicated source of open space funding through the State's Corporate Business Tax. Counties and municipalities have helped accelerate the pace of open space preservation by creating open space funds of their own.

To learn more about the future of land preservation and stewardship, we contacted one of the State's leading experts, John S. "Jay" Watson Jr., Co-executive Director of the nonprofit New Jersey Conservation Foundation and head of its land protection and urban action programs.

Jay's priority is to protect high-quality lands for their natural resource,

habitat and climate resiliency values. He also works to advocate for and create "green projects" in New Jersey cities to make sure that everyone everywhere has access to quality open spaces, tree-lined streets and a high-quality environment.

There aren't many people in the land conservation field with Jay's depth of experience. Before joining the nonprofit sector, he spent nearly 30 years in the New Jersey Department of Environmental Protection (DEP), most of it in the nationally-recognized Green Acres Program. He was promoted to Assistant Commissioner for Natural and Historic Resources and soon after was named the Department's Deputy Commissioner until his retirement from the DEP in 2010.

Here, Jay answers ANJEC's questions about the role of New Jersey's municipalities in preserving open space for parks, preserves, recreation facilities and more.

Q – Why is open space a good use of taxpayer dollars?

A – As I see it, preserving open space means making an investment in the public's health and quality of life. Preserving natural lands protects clean drinking water and air, helps mitigate climate change by sequestering carbon, and safeguards habitats needed to maintain a diversity of native plants and wildlife, including pollinators. Open space gives us beautiful places to enjoy fresh air and outdoor recreation, which benefits our physical and mental health.

Preserving our farmland protects high-quality soils for growing that “Jersey fresh” healthy local food.

Q – How many New Jersey municipalities have open space taxes?

A – There are 227 municipalities in New Jersey that have created special taxes for acquiring open space, building new parks, preserving agricultural lands and protecting local historic and heritage sites. In

the November 2022 election, nine of the 11 municipal open space ballot questions passed. Three towns – South Plainfield, Glen Rock and Bordentown – created brand new open space funds, while six other municipalities either increased or re-authorized their open space funding. Voters in two towns, Robbinsville and Edgewater Park Township, said no to tax increases, but their existing open space taxes remain in effect.



Jay Watson

Q – Are open space taxes only for rural and suburban municipalities that still have a lot of undeveloped land?

A – No, not at all. Many New Jersey cities and suburbs have created open space funds. They may not be able to acquire hundreds of acres at a time, but they can use the funds to buy smaller parcels to create neighborhood parks or improve recreation facilities at existing parks.

Q – How can towns leverage their municipal open space taxes to get additional funding from other sources?

A – Municipal open space trust funds can be used as a match to obtain funds from various levels of government. First, all 21

New Jersey counties have their own open space taxes, and municipalities can apply for matching grants. On a regional level, preservation funding is also available from the Highlands Council and Pinelands Commission for land within their coverage areas. On the State level, there’s the Green Acres Program to preserve open space, the Farmland Preservation Program run by the Agriculture Development Committee, and State

Natural Resource Damage funds from polluter settlements. Towns with voter-approved open space trust funds receive certain advantages under the Green Acres program and are better-positioned to leverage State matching funds. On the federal level, there are many land preservation programs run by the US Fish and Wildlife Service, the National Fish and Wildlife Foundation and the US Department of Agriculture. The best-known

federal program is the Land and Water Conservation Fund, which has preserved open space and built parks all over the United States.

Q – What about private funding sources?

A – There are many private funders that help protect land and natural resources in New Jersey, including The Nature Conservancy, the William Penn Foundation, the Open Space Institute and the 1772 Foundation. Many successful open space and farmland preservation projects in New Jersey have used municipal open space funds matched with public and private sources. New Jersey Conservation Foundation often works to coordinate

land preservation funding among multiple public and private agencies for large and complicated projects. For example, a 320-acre land preservation project in Mercer County several years ago pooled funding from a dozen public and private agencies!

Q – Your organization has assisted municipalities with acquiring funds through the Green Acres Program. What is required of towns that accept these State funds?

A – Any town that accepts Green Acres funding must conduct a complete inventory of all recreational and open space lands and agree that the funding will be used to achieve a net increase in acreage or facilities. Municipalities are not allowed to sell off existing parcels in their open space inventories, except under very limited special circumstances. In the rare instances when open space “diversions” are permitted, the lost open

space must be replaced with other lands of equal or greater size, value and usefulness. Those diversion requests, if passed by Green Acres, must be approved by the Commissioner of the DEP and the State House Commission.


Q – How does land stewardship fit into the preservation picture?

A – Acquiring open space is just the beginning of our responsibilities. Once preserved, our lands must be constantly cared for to protect the conservation and recreation values they provide. For example, invasive plants must not be allowed to crowd out native species on land that has been protected as wildlife habitat. Good land stewardship requires control and removal of harmful invasive plants.

But it’s important to distinguish stewardship from routine maintenance. Open space funds are not meant to be used for routine maintenance, like

mowing lawns and caring for athletic fields. Maintenance tasks belong in municipal public works budgets.

We have been incredibly successful preserving land in this densely developed and populated State of ours. Now we must continue to stake our final claims for the people, plants and wildlife, and figure how we can be excellent stewards for many future generations.

To learn more about New Jersey Conservation Foundation’s work, go to www.njconservation.org. 



*Sourland Mountain Preserve,
East Amwell*
Courtesy of NJCF

Howell Township raises open space awareness with QR codes

By **N. Dini Checko**, ANJEC Project Director

When people see undeveloped and unmarked land in their town, they may assume that it's not owned by anyone or not worth much. Howell Township is working on changing that mindset through an education campaign that includes QR codes to highlight the town's preserved open space (OS). The municipality has been partnering with Monmouth County, Monmouth Conservation Foundation and the NJ Department of Environmental Protection (DEP) Green Acres program to preserve OS for years.

Matt Howard, Howell's Director of Community Development, observes that between warehouse development, the demand for affordable housing and the desire to maintain the community's unique character, the public wants to know that land is being preserved in the town and county. The Department of Public Works is installing signs throughout the township highlighting the acres of OS that Howell has actually saved. The QR code on the signs connects to a page on the town's website featuring a description of each parcel, including the date of acquisition, the location, total acreage and funding source.

(www.twp.howell.nj.us/600/Preserved-Township-Properties)

Lisa Doud, the dedicated volunteer who chairs Howell's Environmental Commission (EC), shade tree commission and green team, has an eagle's eye perspective on educating the community about Howell's OS properties. For example, Doud shared the township's

vision for expanding the awareness campaign on a web page dedicated to include wildlife footage, geocaching challenges and highlighting native flora/fauna. By garnering press coverage from local newspapers and attending Council meetings, Doud promotes environmental programs and initiatives while touting the value of volunteerism.

Jena Cosimo, Director of Acquisitions at Monmouth Conservation Foundation, encourages all municipalities to be proactive in purchasing and maintaining open space. Unfortunately, most towns are too reactive and it affects quality of life for both residents and wildlife. OS provides buffers to developed areas that can: passively aid in stormwater and septic management; improve water quality; protect sensitive environs such as steep slopes and stream corridors; improve air quality through the absorption of pollutants and increased oxygen production; and provide diverse habitats for wildlife. In addition, because developed land incurs costs to the taxpayers for schools and other services, OS preservation adds economic value through property tax savings, not to mention reducing costs for health care and adding tourism revenues.

The Monmouth County Parks System has a robust and detailed *OS Plan*. (www.co.monmouth.nj.us/documents/132/Open-Space-Plan-2019-Web.pdf) Cosimo offered the following key recommendations:

- All levels of government should review open lands for potential preservation based on ecological values prior to



Sign identifying preserved open space in Howell

approving them for other uses; and act to ensure that those properties with particular value remain in public ownership.


- Towns can utilize local OS trust funds to acquire, develop, and maintain local parks, recreation facilities and other open areas. They can also actively pursue DEP Green Acres funding and County OS grants.

ECs, as part of their enabling legislation, are charged with maintaining their town's

index of all open lands and the proper use of such areas and to advocate to the municipality for their inclusion in the municipal master plan. In this capacity, they can encourage their towns and private developers to pursue creative development techniques, such as cluster zoning and lot size averaging as a means to protect natural, cultural and historic resources.

Towns can also create a comprehensive *OS Plan* to address local issues of redevelopment, protection of natural, cultural and historic resources, recreation opportunities, preservation of community character and green infrastructure. For more information about open space planning, see ANJEC's Resource Paper, "*Open Space Plan, Charting a Course for Your Town's Green Assets*," at <https://anjec.org/wp-content/uploads/2021/04/OpenSpacePlan-2021.pdf>.

Municipalities are invited to apply to ANJEC's Open Space Stewardship Grant to fund local efforts to highlight their towns' open space properties and enhance them in a variety of ways.


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Candace McKee Ashmun Memorial Fund

The ANJEC family honors the memory of our founding executive director, friend, colleague and mentor Candy Ashmun, who was our most loyal supporter and volunteer right up to her last days.

ANJEC has established the Candace McKee Ashmun Memorial Fund in her honor. Donations to the fund are used to support the ANJEC Open Space Stewardship Grant Program, an annual program for municipal environmental commissions to carry out local stewardship projects.

Candy's support of ANJEC's mission and her unwavering belief in the power of the local environmental commission makes this program a perfect way to remember her legacy for years to come.

To donate, mail a check to ANJEC, PO Box 157, Mendham NJ 07945, or donate online at anjec.org/donate. 

Full steam ahead: Essex-Hudson Greenway update

By **Sheila Baker Gujral**, ANJEC Resource Center Director

The plans for converting nine miles of unused rail line into a connective community greenway in Essex and Hudson Counties is on track. While the entire project should take eight to ten years, Governor Murphy is hoping to have the first section of the track done by the time he leaves office in 2026.¹

In September 2022, the State of New Jersey purchased the “old Boonton Line,” a disused rail line, for \$65 million, with plans to convert it into a greenway thoroughfare that goes from Montclair all the way to Jersey City. The towns of Montclair, Glen Ridge, Bloomfield, Belleville, Newark, Kearny, Secaucus, and Jersey City will all be able to participate in the multiple benefits of this project. The proposed greenway will:

- connect people and communities;
- offer multiple health and wellness opportunities;

- create a safe, offroad trail to ride a bike, walk, run, birdwatch, educate and play;
- enhance local economic activity and job growth;
- ease traffic and offer active transportation options;
- create alternative commuting options like biking or walking;
- provide close-to-home, easy access to the outdoors; and
- offer numerous opportunities for green infrastructure and stormwater storage.

This Essex-Hudson Greenway is New Jersey’s “single largest conservation project ever”² and will need a great deal of local knowledge to guide the process.

¹ <https://gothamist.com/news/first-part-of-njs-9-mile-essex-hudson-greenway-to-open-before-gov-murphy-leaves-office-he-says>

² www.essexhudsongreenway.org/governor-phil-murphy-and-the-state-of-new-jersey-finalize-purchase-of-old-boonton-line-to-create-greenway/



The Essex-Hudson Greenway will replace former rail beds.


The Department of Environmental Protection (DEP) is committed to “deep, robust community engagement,” according to a statement, and is working on a phased approach to developing the unused rail line. They will begin working on segments while concurrently developing the *Master Plan* for the project, but funds are available to begin the work now. According to the Governor’s Office, “the fiscal year 2023 budget includes \$20 million in federal funding from the *American Rescue Plan* to begin the remedial and structural work needed to transform the rail line.”

According to DEP Deputy Commissioner Sean Moriarty’s office, work will start soon, but it will be some time before the public will have access to the greenway. “Unfortunately, the Greenway is closed to public access while under development. Due to the legacy of industrial pollution in the vicinity, its prior railroad usage and the dilapidation of existing infrastructure, the Greenway is not currently suitable for public use.”

In the meantime, community members can reach out to their municipal leaders to see how they can help. “Community engagement is vital to the success of the Greenway and fully understanding how members of

host communities want to use and interact with the Greenway, how it can best serve community needs and methods to ensure equitable distribution of the myriad environmental, public health and economic benefits promised by this transformative project.”

At press time, DEP was going through their bidding process to determine which organization would be leading the efforts of community engagement and outreach. In the interim, the New Jersey Bike Walk Coalition, the group that spearheaded efforts to shepherd this dream into reality, is setting up meetings with municipal officials in all eight towns. Environmental Commissioners in those towns should make sure to reach out to their municipal officials to help with community outreach and support the project – this is a big undertaking and commissions can play a significant role in maximizing the benefits to their communities.

Is your town on the line? Want to learn more? Email me at sbakergujral@anjec.org. 

Why I give to ANJEC...

**“BECAUSE INFORMED
LOCAL DECISION
MAKING MATTERS”**

ANJEC’s localized education and organizing work lifts up community voices and leads to statewide policymaking as shown through ANJEC’s work getting the *Plastic Pollution Reduction Act* across the finish line. Informed local decision making matters, which is why I give to ANJEC.



Sandra Meola Bodner is a member of the ANJEC Board of Trustees and a consultant working in the clean energy space.

Visioning planning for land conservation

By **Tricia Aspinwall**, Land Conservation Manager,
The Nature Conservancy, New Jersey

Visioning Planning to identify and protect critical remaining open space is vital as New Jersey moves towards total buildout. Coordinating this effort, The Nature Conservancy and their partners are hosting a series of workshops to develop a shared vision for the future of conservation in New Jersey. These geographically organized sessions offer dedicated discussion about some of the State's iconic landscapes – the Delaware Bayshore, Highlands, and Kittatinny Ridge and Valley – and our shared challenges to conserve them. Our plan is to do sessions in additional landscapes in 2023-24.

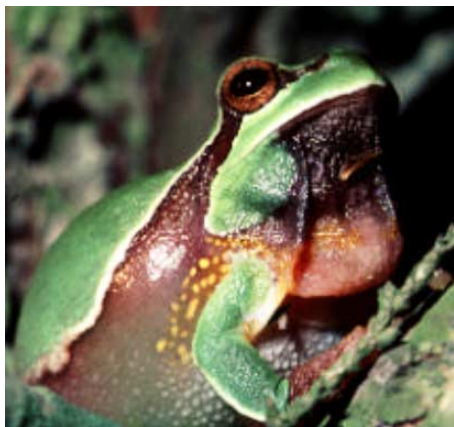
Workshop content and structure are tailored to participant needs, including a presentation on using the New Jersey Conservation Blueprint (www.njblueprint.org) online modeling tool to identify the most critical lands to

protect. New Jersey will be the first state to reach functional buildout, when all land is either preserved or developed. With this urgency, we must act to protect the lands with the highest value for habitat connectivity, water quality, climate change adaptation, farmland and accessible recreation.

Visioning Workshop participants will learn how to use the Blueprint for planning, hear successful Blueprint case studies and collaborate on how conservation organizations and land use decisionmakers can work together to accomplish meaningful results. All attendees will leave inspired with new ideas and action plans – and we have seen this happen consistently at previous workshops!

Past workshops were held in the NJ Highlands (December 2021), the Kittatinny Ridge and Valley (April and June 2022), and the Delaware Bayshore in February 2023. Additional visioning workshops will be held this year, with the Pinelands planned for late 2023, as well as follow up workshops in the Highlands and Kittatinnies. We invite broad participation, including from land preservation professionals and volunteers active in local Open Space Committees or Environmental Commissions.

For more information about our workshops, please reach out to me at tricia.aspinwall@tnc.org.



Some endangered species like the Pine Barrens treefrog depend on particular landscapes to survive.

Announcing ANJEC's 2023 open space stewardship grant program

2023 marks the 10th year of this funding opportunity

By Elizabeth Ritter, ANJEC Deputy Director

ANJEC is delighted to announce that one-year grants of up to \$1500 will be available to environmental commissions in New Jersey through our Open Space Stewardship Grant program. Application materials are now available on the ANJEC website (<https://anjec.org/wp-content/uploads/2023/02/2023Grant-Application.pdf>).

- Grant applications are due on Friday, April 17, at 4:30 PM.
- Successful applicants will be notified by May 12, 2023.

We are also pleased to announce the continuation of our partnership with the Licensed Site Remediation Professionals Association Foundation (LSRPAF) to

fund more projects on remediated sites. We are excited to see local groups committed to work on these reclaimed properties.



Path through the black swallowtail garden in Caldwell.


Photo by Warren Marchioni

ANJEC expects to award approximately 15 grants in 2023. No cash match is required. Suitable projects include, but are not limited to:

- pollinator gardens
- trail building, signage, maintenance
- printed or online guides, maps, inventories of open space, trails
- open space or trails assessments, plans, maps
- multi-town plans to link open space or trails
- conservation easement inventory, monitoring, outreach, education
- management of invasive species
- habitat enhancement on open lands
- restoration or maintenance of riparian areas within preserved public open space

- educational stormwater management projects on preserved public open space.

These grants are funded in part by the Candace McKee Ashmun Memorial Fund, supported by donations (<https://anjec.org/donate/>).

On this milestone 10th year of this program, ANJEC is happy to share photo highlights of just a few of the recent grant projects on the following pages. It's amazing to see the work, dedication and collaboration that Environmental Commissions have achieved! 


What's new with the Municipal Separate Storm Sewer System (MS4) permit?



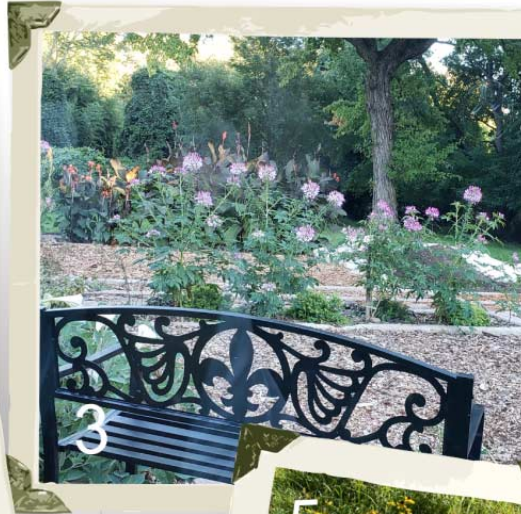
All municipalities must now:

- Comply with Tier A requirements;
- Develop a watershed improvement plan to address water quality;
- Pass a salt storage and tree protection ordinance;
- Create a designated municipal stormwater web page;
- Map entire MS4 infrastructure using GIS – from inlets to outlets – and post publicly;
- Meet new stormwater infrastructure inspection and maintenance schedules;
- Retrofit all storm drain inlets;
- Street sweep all roads with storm drains three times a year, all other roads once a year;

- Remove excess deicing material from road surface 72 hours after applying;
- Repair roadside erosion within 90 days or submit repair schedule;
- Inspect all storm drain inlets and 20 percent of catch basins yearly;
- Comply with new storage requirements for asphalt cold patch, salt piles, compost, bulk liquids, construction/demolition waste, yard trimmings, scrap tires, inoperable vehicles or equipment.

The full permit and timeline for deliverables is available at www.nj.gov/dep/dwq/tier_a.htm. 

ANJEC Open Space Ste



wardship Grant projects



1 *The Tinton Falls Environmental Commission (EC) installed osprey nest platforms to encourage these magnificent birds to breed in ideal habitats near water (food) sources. They hosted an Osprey Fest that provided fun for young visitors as well as an expert presentation on ospreys and their lives.*

2 *The Jersey City EC created a pollinator garden in Bergen Hill Park. They invited families and children to join in the planting event and had students participate by making pollinator boxes.*

3 *The Teaneck EC collaborated with the Teaneck Garden Club to create a reading garden on the site of an old sewage treatment plant. They installed native plants and benches for community enjoyment.*

4 *The Ocean City EC established a Monarch Waystation near a school. The Environmental Commission was happy to find pollinators visiting the garden in a very short time!*

5 *Delanco Township created a pollinator garden with educational signs and native plants to create a beautiful park to visit and share the importance of native pollinator plants. The Pollinator Palooza project is ongoing!*

6 *The Lambertville EC renovated the Cavallo Park rain garden in town to help protect local waterways and reduce flooding.*

7 *The Evesham EC updated a town trail to make it walkable. The Commission also took on the task of adding native wildflowers and grasses to a local park and a preserve.*



ANJEC welcomes Hana Katz

A

NJEC has gained a fresh new face with valuable experience and boundless enthusiasm in Hana Katz, our new Policy and Program Associate. Since joining our ranks, Hana has been busy collaborating with environmental commissions, helping to implement State initiatives and managing coalition work with ANJEC partners, especially in the Highlands area.

While earning her degree in Environmental Science and Law at New Jersey City University, Hana was an energetic, nature-loving student activist. There she served as an environmental student leader and the head delegate of her Model United Nations team.

Hana previously worked in several local, State, and federal government positions on successful initiatives surrounding education, sustainability, policy analysis and public interest advocacy, mainly in South Jersey and Jersey City.



Hana Katz

Hana spends her free time hiking, doing photography, visiting museums, cooking, painting and teaching environmental science. 🌊

ANJEC Members! WE'D LIKE TO HEAR FROM YOU!

Please complete our online Member Interest Form so we can better support you in accomplishing your goals and provide targeted resources to meet your needs for 2023.

The online form has only eight questions and should take about 10-15 minutes to complete. Thanks for sharing your thoughts! 🌊

Member Interest Form



SCAN HERE, or go online to:
forms.gle/4StpP8dXFmAkRkuy7



Will New Jersey ban the sale of invasive species?

By **Michael Van Clef**, Ph.D., Friends of Hopewell Valley Open Space and New Jersey Invasive Species Strike Team

New Jersey is one of only five states in the country that does not have a law banning the sale of invasive plants! While this isn't a point of pride, there is a possibility that new legislation will make us a leader in addressing a crushing threat to our natural lands.

In fall 2022, a subgroup of Senator Bob Smith's Forest Task Force set out to develop recommendations to improve Senate Bill S2186 introduced by Senators Linda Greenstein and Bob Smith. We are extremely grateful for their attention to this critical problem. Over 70 members of the Forest Task Force signed on with their support for the resulting recommendations.

The subgroup, of which I'm a member, consists of concerned and very dedicated citizens, along with representatives from NJ Audubon, NJ Conservation Foundation and the Native Plant Society of New Jersey. In December, three members of our subgroup testified before the Senate Environment and Energy Committee and our suggestion to re-establish the New Jersey Invasive Species Council was unanimously approved by the Committee (and also supported by the nursery trade association).

What the bill calls for

The current version of the bill would ban the sale of 28 invasive plants, including Norway maple, Chinese silvergrass, English ivy, and Japanese barberry. It allows for the sale of scientifically proven, sterile cultivars, which already exist for Japanese barberry and several other highly invasive species. Under the current legislation, the NJ Department of Agriculture would have the

authority to list species, allow special permits and enforce regulations.

We continue to work toward improvements with the bill sponsors and representatives of the NJ Nursery and Landscape Association. A primary recommendation is making the NJ Department of Environmental Protection (DEP) co-lead all efforts with NJ Department of Agriculture. Each department has critical knowledge and resources required to tackle the invasive species problem and neither can do this alone.

While the current version of the legislation would ban the sale of over two dozen invasive plants, we feel that this only scratches the surface of the much larger number of invasive plants in the State. We are recommending that the legislation empower the Council to adopt a protocol and evaluate the potential listing of nearly 200 species deemed to be invasive or potentially invasive by the New Jersey Invasive Species Strike Team. Importantly, we are also suggesting a regional approach that considers invasive species listed from Virginia through New York. This would allow for a proactive climate change approach and capitalize on the hard work on species evaluations already completed by our neighbors.

While we might be late to the party compared to other states, we hope to be the best guest by having very thoughtful and thorough legislation. The old cliché of "when you find yourself in a hole, stop digging" applies here – we absolutely must stop the purposeful sale and propagation of invasive plants that keep getting us deeper

in the hole. And we feel strongly that this can be done reasonably, without unnecessary financial burden, in partnership with New Jersey's nursery industry.

We hope that this legislation will pass in 2023 and urge all of those concerned to communicate their support for a comprehensive and effective bill to their State representatives. In the meantime, we hope that anyone purchasing plants will err on the side of caution and avoid invasive or potentially invasive plants found on the Strike Team's Do Not Plant List (www.fohvos.info/wp-content/uploads/2022/05/2022Common_DoNotPlant.pdf). 🌿



English Ivy is an invasive plant in NJ.

New Jersey leads the nation in bold climate legislation

By **Hana Katz**, ANJEC Policy and Program Associate

New Jersey's 2021-2022 legislative session yielded many triumphs for the environment, continuing the momentum of energetic lawmakers working towards sustainable goals. As the Murphy Administration continues its intersectional pursuit of a clean energy future, stakeholder participation and the balancing of priorities have become central to effective policy building. Luckily, the NJ Legislature seems to generally agree on the need for laws that use evidence-based approaches to incentivize sustainability in our most polluting sectors. The Senate and Assembly have made a great push for the electrification of NJ's energy sector and the regulation of environmentally detrimental substances and practices.

On February 15 Governor Phil Murphy signed three Executive Orders (No. 315, 316 and 317) to support and solidify NJ's statewide shift towards electrification.¹ These orders are meant to address environmental injustices and inequalities affecting vulnerable populations while assisting the building sector in achieving carbon neutrality through incentivization. With the

federal deployment of the National Electric Vehicle (EV) Infrastructure (NEVI) Program, over \$104 million in funding is being sourced to NJ over five years to cover the costs for construction and maintenance of EV charging stations. The State will also allocate \$70 million in unobligated Regional Greenhouse Gas Initiative auction proceeds toward lowering consumer upfront costs for medium- and heavy-duty EV adoption. This greatly improves the State's financial capacity to fulfill its climate action goals while reducing the exposure of vulnerable communities to transportation-related air pollution.


Executive Order No. 315, requires 100 percent of the electricity sold in NJ to originate from clean sources. This order phases out gas-powered vehicles and requires all new cars and light-duty trucks to be zero-emission by 2035, similar to California's Advanced Clean Cars II Law.

Executive Order No. 316 requires carbon emission-free space heating and cooling systems to be installed in 400,000 homes and 20,000 commercial properties. It also aims to make 10 percent of low-to-moder-

ate-income properties in NJ electrification-ready by 2030.

Executive Order No. 317 builds a partnership with stakeholders to plan for the Future of the Natural Gas Utility in New Jersey.

Besides prioritizing EVs, NJ has regulated the use and sale of certain products in the State. The concrete industry accounts for seven percent of global carbon emissions and a significant portion of concrete produced in the United States is used for public projects. On January 30, Governor Murphy signed bill S287 to incentivize the decarbonization of NJ’s concrete industry and promote the use of low-carbon concrete, which uses carbon capture technology post-installation or achieves carbon neutrality in its manufacturing and transportation process. This bill is the first of its kind in the nation and gives corporation business tax credits and gross income tax credits to developers who choose to use low-carbon concrete.

With these new policies, incoming funding from federal and State programs and the collaborative partnership between private and public entities, NJ is creating a bold roadmap for State climate action. 

¹ www.nj.gov/governor/news/news/562023/20230215b.shtml

The **mission of ANJEC** is to promote local action to protect and restore New Jersey’s natural resources and to ensure healthy communities for today and the future.

ANJEC advances its mission by engaging in equitable and inclusive practices through leadership, partnerships, education, advocacy for strong public policy, and in support of environmental commissions, public officials, and communities throughout New Jersey.

“Why I support ANJEC’s mission.”

“Every single thing we do, every decision that is made for communities, will impact the future environment of the space. They are intrinsically tied. ANJEC’s mission statement puts this front and center. It’s about local leadership, the communities, the residents, and giving voice to people through partnerships, education and advocacy to ensure our resources are here today and in the future.”

**Meishka Mitchell, ANJEC Board Member,
CEO of Emerald Cities Collaborative**



Can solar energy and agriculture work together in the Garden State?

By **Cheryl Reardon**, ANJEC South Jersey Project Director

With approximately two billion more people expected to be added to the planet by 2050, increased energy and food production will be required to meet the demand. The problem is further exacerbated by climate change causing increased storms and flooding along with extended droughts that will diminish many countries' capacity to meet the food, energy and water needs of their populations. The impending energy and food crisis needs to be addressed carefully, with sustainable solutions a top priority,

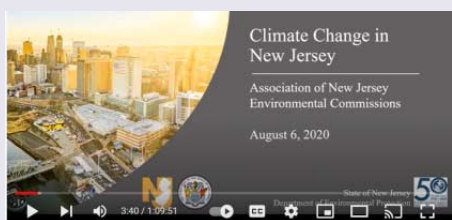
New Jersey has set very aggressive goals for renewable energy. This February, Governor Murphy issued a series of executive orders to speed-up the State's transition to a 100 percent clean energy economy by 2035 – 15 years ahead of the goal he set in his first term (Page 24).

According to the 2019 *Energy Master Plan*, this will require 32,000 megawatts of installed photovoltaic (solar) electricity. Successfully meeting the 2035 goal will likely require utilizing both developed and currently undeveloped land for photovoltaic infrastructure.

Rutgers agrivoltaics program

Agrivoltaics is the simultaneous use of land areas for agriculture (crops and/or livestock) along with photovoltaic power generation using solar panels. The New Jersey Agricultural Experiment Station at Rutgers received \$2M in the 2022 State budget specifically for building research and demonstration agrivoltaic systems on their research farms. These systems will allow for detailed experimentation and engineering that would not be possible in a commercial setting. Ensuring that both goals of dual use can be consistently met in NJ is only possible through research and demonstration trials.

Over the past decade, thousands of acres of farmland have been converted to other uses, including large commercial solar installations, raising concerns about loss of agriculture, along with negative impacts to jobs and the economy. Might agrivoltaics



Visit the ANJEC YouTube channel

You can find recordings of ANJEC webinars, workshops and trainings from the past three years, including Environmental Congress presentations, on ANJEC's YouTube channel - ANJEC Views. This is your opportunity to:

- view presentations you may have missed;
- provide training for new environmental commission members; or
- share valuable content with municipal officials.

You can find it all at www.youtube.com/channel/UCCEuWtY-juaDStB-2zS5SpQ.



A field of raspberries growing among solar panels Photo by Jack's Solar Garden

provide struggling farmers with another source of revenue or energy supply that would help keep them farming here in the Garden State?

Rutgers Agrivoltaics Program will help to provide scientific data to answer many of the questions surrounding this issue. It explores growing and harvesting crops under solar panels in a way that could benefit both.

- Can crops grow better and require less water when planted beneath solar panels that shield them from excessive heat, cold and ultraviolet radiation, thus increasing the yield of certain crops?
- Could placing solar panels above crops reduce evaporation?
- How do solar panels impact stormwater runoff, soil erosion and potential flooding on important soils (especially NJ's prime agricultural soils)?

Recent advancements

In June 2021, the New Jersey Legislature passed the *Dual-Use Solar Act* establishing the Dual-Use Solar Energy Pilot Program for unpreserved farmland. This program enables a limited number of farmers to have agrivoltaic systems on their property while the technology is being tested. Until recently, the operation of large equipment on farmland made solar energy generation difficult and shade under the panels presented another obstacle. Today, better designed agrivoltaic systems may have the potential to be constructed high enough to allow operation of farm equipment below them, along with the possibility of uniform ground-level sunlight resulting in lower negative impacts on crop productivity.

More info

- Rutgers Agrivoltaics Program – <https://ecocomplex.rutgers.edu/agrivoltaics-research.html>
- Rutgers Agrivoltaics Program Update January 2023 – <https://ecocomplex.rutgers.edu/documents/Rutgers%20Agrivoltaics%20Program%20Update%201-7-23.pdf>



Wind and whales – just the facts

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

New Jersey is experiencing acute impacts of the climate crisis, and all of the science indicates that the situation will get worse before it gets better. Seven of the ten warmest years on record in New Jersey have occurred since 2010 and 11 of the warmest 15 summers have occurred since 2000. The warmest January and fifth warmest February on record. (<http://climate.rutgers.edu/stateclim/?section=menu&target=feb23>)

New Jersey has experienced a five percent increase in precipitation in recent decades. In the Raritan Watershed, five of the seven largest floods on record have occurred since 1999. Preventing cata-

strophic escalation of the climate crisis requires us to reduce greenhouse gas emissions (GHGs) as much and as quickly as possible.

ANJEC supports increasing renewable energy production, including offshore wind production. Since 2015, ANJEC has helped to facilitate community engagement in the development of the *Mid-Atlantic Regional Ocean Action Plan* and the creation of the Mid-Atlantic Ocean Data Portal (<https://portal.midatlanticocean.org/>) known as MARCO. MARCO mapping identifies the multiple uses of the mid-Atlantic, including conservation areas, shellfish beds,

Last September Governor Phil Murphy signed Executive Order No. 307, increasing New Jersey's offshore wind goal by nearly 50 percent to 11,000 megawatts by 2040.



fishing areas, migration routes, shipping corridors, IT lines, and more. MARCO has been used to identify the best available areas with the least impacts for sighting offshore wind projects.

Is wind energy impacting whales?

The current wind projects continue to undergo extensive oversight and permitting by the federal government through the Bureau of Ocean Energy Management and the NJ Department of Environmental Protection. Critics of offshore wind development have attempted to blame ocean floor wind research for the recent spate of whale deaths on the East Coast. But facts are important to keep in mind as New Jersey increases renewable energy production.


- Climate change is the biggest threat to wildlife, including marine mammals. Coastal observers have witnessed more whales in the northeast this past winter because the oceans are warmer than they have historically been and food sources such as menhaden/bunker are lingering. Migration patterns are disrupted.
- The Port of NY/NJ is now the busiest in the nation, seeing an endless stream of cargo and fossil fuel ships. The Ports of Philadelphia, Delaware, Virginia, Boston, and Baltimore all help round out the top 20 busiest ports in the US. Speed restrictions on cargo and fossil fuel vessels apply only in the presence of right whales, not when only humpback whales are present.
- Vessel strikes are a common injury among whales that began washing up in increased numbers along the East Coast

starting as far back as 2016. The highest number of whale strandings occurred in 2017 and 2020, years before any ocean floor wind research began. The National Oceanic and Atmospheric Administration has declared an Unusual Mortality Event and have increased monitoring and investigations.

- Technology used to survey the ocean floor for the construction of wind energy equipment is much smaller, quieter and lower-impact than surveying used to explore for offshore drilling of fossil fuels and that which the military employs.
- Wind energy research vessels are among the most highly regulated in the ocean. These vessels are required to have Protected Species Observers on board to conduct monitoring to avoid

impacts to marine wildlife. Wind research vessels have imposed speed restrictions to avoid strikes with wildlife and must report wildlife strikes. None have been reported at the time of publication.

- The most common causes of whale mortality are: vessel strikes, entanglement in abandoned commercial fishing gear, plastic pollution and climate change.

ANJEC will continue to follow the science to recommend policies and actions that enhance resilience to the impacts of the climate crisis and reduce GHG emissions to prevent climate impacts from growing exponentially worse. 

Learn more about wind

We encourage you to learn more about responsible wind energy projects off of New Jersey's coast by hearing from university researchers and representatives of the wind companies themselves who spoke at ANJEC's 2022 climate mini-series. Recordings are available on YouTube on ANJEC's channel @ANJECviews:

1. The arctic meltdown, why it matters in NJ
2. Ocean & wildlife science, avian research
3. Wind project updates.

Celebrate Earth Day 2023!



ANJEC wants to help your environmental commission promote your Earth Day plans on social media!

What will your environmental commission and community members be doing to honor the day?

Share your plans with us by tagging ANJEC on your social media event posts and ANJEC will share your event posts on our social media pages. To tag us, use the social media platform handles below:

- Facebook @ANJECpage
- Twitter @ANJECtweets
- Instagram @ANJECposts

Share your photos of Earth Day events with us too and your EC could be pictured in an upcoming ANJEC Report! Submit photos to info@anjec.org with subject line "Earth Day Event Photos."

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New Jersey's Clean Energy Program is a statewide program that offers incentives, programs, and services that benefit New Jersey residents, businesses, educational and non-profit entities, and government entities to help them save energy, money, and the environment.

www.NJCleanEnergy.com
Email: Outreach@NJCleanEnergy.com
Call: (866) 657-6278

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