



Kingwood Township Environmental Commission Annual Newsletter and Report 2022

Habitat Restoration at Bulls Island

In 2022, the Kingwood Township EC worked in partnership with Delaware Township EC, D&R Canal State Park, and the AmeriCorps NJ Watershed Ambassador Program to obtain a \$5,000 grant from the Lower Delaware Wild and Scenic River Management Council. The goal of the project was to plant native trees, shrubs, and herbaceous plants at Bull's Island Recreation Area to help restore the habitat of the former campground area. The project will help protect the Delaware River and its environment, including rare and endangered plant and animal species, promote biodiversity by providing habitat, enhance passive recreational opportunities, and educate visitors.

Two areas in the former campground of the Delaware and Raritan Canal State Park were targeted for restoration using LDWSR grant funds. The sites were selected due to high visibility along the new Inlet Trail that was once an old campground roadway. Former campsite buildings had been removed, leaving gaps in the existing floodplain forest. Grant funds were used to purchase 103 native trees, 38 native shrubs, and 232 native herbaceous plants, and fencing and fence posts to protect the trees and shrubs from deer herbivory. On April 28, 2022, volunteers, primarily from the AmeriCorps NJ Watershed Ambassador Program, prepared for the planting days by cutting lengths of fencing, digging approximately 36 Christmas ferns for transplanting from a path which gets mowed, and other tasks.

On April 30 and May 1, 2022, over 50 volunteers from Delaware and Kingwood Environmental Commissions, Watershed Ambassadors, and the public planted the native plants, installed tree protection fences, and removed invasive plants. The Inlet Trail is a 1.3 mile paved path which was officially opened to the public on June 3, 2022.



Climate Change in NJ: Guest Speaker

The EC sponsored a guest speaker at the March EC meeting. Dr. David Robinson (New Jersey State Climatologist and Distinguished Professor of Geography at Rutgers-New Brunswick) spoke about “New Jersey’s Changing Climate”.

The [Office of the New Jersey State Climatologist](#) website is the go-to place for information for current weather and historical climate information which is important for all residents and decision makers in the state.

Some highlights from Dr. Robinson’s presentation:

- There are five diverse climate zones in New Jersey: North, Central, Southwest, Pine Barrens and Coastal. These climate zones experience a wide variety of weather and climate conditions.
- In New Jersey, 1955 was the hottest, driest July on record followed by the hottest, wettest August on record with two major back-to-back hurricanes (Diane and Connie) which caused devastating and deadly flooding.
- New Jersey experienced a drought in 1964-1966, the first since the 15th century according to tree ring records.
- There were three “Top-10” floods on the Delaware River in three consecutive years: a tropical storm in September 2004, snow melt from a Nor’easter in April 2005 and a late season Nor’easter in June 2006.
- In New Jersey, the average September rainfall is 4” however, on September 1-2, 2021, New Jersey experienced an EF-3 tornado and many areas received two-months’ worth of rain in six hours from post-tropical cyclone Ida, resulting in deadly flash flooding and extensive river flooding. Kingwood Township reported 6.78” of rain from its two weather stations located at the Route 12 State Police Barracks and the Rutgers Snyder Research Farm.
- Since 1895, in New Jersey:
 - 2011 and 2018 were the wettest years on record
 - November and December 2021 were the driest November and December months on record
 - 15 of the 20 warmest years have occurred since 2001, 19 of the 20 warmest years have occurred since 1990
 - 2012 was the warmest year on record, 2020 was second and 2021 tied for third.

Well Water Testing 2022

Private well owners are responsible for the safety of their water and regular testing is the only way to know for certain that the water is safe to drink. Kingwood Township's choice to hold a water testing event enables residents the opportunity to test their drinking water conveniently and affordably for a variety of primary and secondary contaminants. The Community Well Test Event was held on October 8th and October 11th at the Kingwood Municipal Building. In total, 26 residents attended the event to have their well water tested and 21 of those returned their samples on Wednesday, October 12th!

The following chart is a summary of data collected from these 21 wells on Primary Contaminants of Concern:

Contaminant	# wells tested in 2022	Limit or MCL*	Range of results (ND=NonDetect)	# wells exceeding MCL
Coliform bacteria	21	Absent	Absent-Present	5
E.coli	21	Absent	Absent	0
Nitrate	20	10 mg/L	ND-6.90 mg/L	0
Lead	3	15 ppb	ND-1.16 ppb	0
Radon	5	2000 pCi/L**	132.8 pCi/L-1303.4 pCi/L	0
Gross Alpha	2	15 pCi/L	0.603-3.58 pCi/L	0
Volatile Organic Compounds (62 chemicals)	2	Varies	ND	0
Arsenic	17	5 ppb	ND- 12.30 ppb	4
Glyphosate	0	700 ppb		
PFOS	3	13ppt	ND- 3.4 ppt	0
PFNA	3	13ppt	ND	0
PFOA	3	14ppt	ND- 3.4 ppt	0

* *Maximum Contaminant Level (MCL). The maximum level of a contaminant which is permitted in public water supplies. Maximum contaminant levels are specified in the Primary Drinking Water Standards set by EPA for contaminants that affect the safety of public drinking water.*

** *There is no standard set in NJ for radon in water. Standards set in other states in our region are used as guidelines. The most protective of these standards is 2000 pCi/L in New Hampshire.*

There are approximately 1713 private wells in Kingwood Township. Under the New Jersey Private Well Testing Act (PWTA) which was signed into law in 2001, wells must be tested for an array of contaminants upon transfer of ownership or if there is a rental on the property. The NJDEP collects and publishes data on the results of the testing which may be explored at <https://www.nj.gov/dep/dsr/pwta/>. In Kingwood Township, 654 wells have been tested as mandated under the PWTA between 2002 and 2023. The following table summarizes available data for Kingwood Township on the percent of exceedances for individual contaminants including the number of wells tested under PWTA.

Percent of Exceedances (Number of wells tested under PWTA)

Nitrate	0.5%, 654 wells sampled
Iron	22.2%, 653 wells sampled
Manganese	27.4%, 654 wells sampled
VOC	0%, 654 wells sampled
Fecal Coliform	2.6%, 651 wells sampled
pH	5.4%, 653 wells sampled
Arsenic	43.4%, 654 wells sampled
Gross Alpha	12.6%, 579 wells sampled
Mercury	Testing not required under PWTA
SOC	0.7%, 134 wells sampled
PFOA	2.2%, 45 wells sampled
PFOS	2.2%, 45 wells sampled
PFNA	2.2%, 45 wells sampled
At least one PFAS exceeded	2.2%, 45 wells sampled
Uranium	0.8%, 132 wells sampled

Based on available data and current public health guidelines, residents of Kingwood are encouraged to test their wells annually for coliform bacteria and nitrates. Those residents living in older homes, built before 1987 are at greater risk of lead exposure from older pipes and solder and should test for lead in their water every 5 years. At least one test for radon and gross alpha are also highly recommended to ensure that members of your household are not exposed to these naturally occurring carcinogens.

Furthermore, residents can protect their water supply by carefully managing activities on their property and near the well. This includes keeping hazardous chemicals out of septic systems, pumping their septic system every 3 years, and limiting the application of fertilizers to lawns and gardens. Information on the Medicine Drop box location was shared with residents in the township newsletter to encourage proper disposal of pharmaceuticals and prevent chemical contamination of surface and groundwater.



Protect Your Drinking Water

WELL TEST KITS AVAILABLE

@ Kingwood Twp. Municipal Building, 599 Oak Grove Rd.
Saturday, October 8th 9am-12pm and
Tuesday, October 11th 5:00-7:00pm

- The only way to know your water is safe to drink is to test it. Everyone in Kingwood relies on water from private wells. Residents are advised to test their water annually for bacteria and nitrates. This basic kit will be offered. Testing will be available for additional contaminants like arsenic, PFAS, boron, gross alpha-uranium and radium screen, lead, and volatile organic compounds.
- Testing done by a state-certified lab at below market cost.
- For more information and current pricing please visit www.testmywell.org or call 908-234-1852 ext.401



*Residents will then return filled bottles to Kingwood Municipal building
Wednesday, October 12th, 7:00am-9:30am



SPONSORED BY THE
KINGWOOD TOWNSHIP
ENVIRONMENTAL COMMISSION

TEST.

DISCOUNT SEPTIC PROGRAM FOR KINGWOOD RESIDENTS

Septic Pumping Fee: **\$350.00** (Up to 1,000 Gallons) + Tax

Call to schedule from **October 1 - 30, 2022**

- Please call to schedule your appointment Mon-Fri 7:00AM- 3:00PM. Payment due on day of service.
- \$0.265 Per Gallon additional (if tank is larger than 1,000 gallons);
- 100 feet of hose- tank must be within 100 feet of pavement
- Septic lid must be exposed (no rocks, mulch, dirt, etc. on top of lid)



Delaware Valley Septic CALL 908-537-6308

Please Reference
Kingwood Twp. Environmental Commission
Discount Program

PUMP.



Medicine Drop Box Location:

New Jersey State Police-Kingwood Station
945 State Highway 12, Frenchtown (908) 996-2864



- Dispose of unused and expired medications anonymously, 7 days a week, 365 days a year
- Drop boxes accept solid pharmaceuticals such as pills, capsules, patches, inhalers, and pet medications. They cannot accept syringes or liquids.
- njconsumeraffairs.gov/meddrop for more info.

Pharmaceuticals are ending up in our waterways, including drinking water sources. Stop unused drugs from getting into the environment or into the hands of those who will misuse them.

DROP.

Discount Septic System Pumping

26 residences took advantage of the discount septic pumping arranged by the EC in October. Septic systems must be used properly every day and inspected and pumped every 2-3 years. See the EC's [septic system fact sheet](#) for more information.

Check the Kingwood website in the late summer for information on 2023 well testing!

NJ Tree Recovery Program

1,000 Free Trees Reforesting Kingwood The NJ Forest Service, in partnership with the Arbor Day Foundation, provided 1,000 tree seedlings that were distributed gratis to Kingwood residents April 9, 2022 at Horseshoe Bend Park. The project was part of the New Jersey Tree Recovery Program, a continuing effort to replace trees that were lost in Superstorm Sandy.

Sustainable Kingwood

Sustainable Kingwood was awarded bronze level certification under Sustainable Jersey for the second time in 2022! Kingwood's application was approved for 15 actions in 7 categories for a total of 170 points.

As part of its efforts to maintain Bronze Certification, the Green Team documented work that the Township is doing to preserve open space and farmland, track energy usage, and protect residents' drinking water supplies.



Stewardship

The EC held 6 stewardship workdays (May 11, June 8, July 13, Aug. 10, Sept. 14, Oct. 12) to straighten tree tubes, remove netting when trees were growing above the tube height, remove tubes where trees had died, remove invasive species, and to weed the rain garden that had originally been planted in 2011.

Between 2018 and 2020, the EC and many volunteers planted about 2,050 native trees and shrubs with Roots for Rivers grants from The Nature Conservancy. These were planted in Kingwood Park and on adjacent township owned preserved farmland to restore a section of Lockatong Creek's riparian zone. Forested riparian buffers reduce sediment, fertilizers, and other pollutants from running off the land into the creek. The trees will also provide habitat for wildlife and shade for trout that need cool water. Tree tubes, protecting the young trees from browsing deer, will remain in place for several years.

In addition, on March 28, 2022, the EC and other volunteers assisted with a trail restoration project lead by AmeriCorps Source Water Protection Ambassador Ritwik Menon. Volunteers tackled a long standing issue with erosion along Horseshoe Bend Park's White Trail. They completed five water bars that will divert surface waters from the trail. White Trail is one of Horseshoe Bend Park's most popular routes and the water bars will reduce or eliminate future scouring from heavy rain and winter snow melts, making the trail safer and more enjoyable.

MS4 Stormwater Permit Update



Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean.

NJDEP requires all municipalities to educate residents about keeping our water clean. Through the annual [stormwater brochure](#)

mailing, planting trees, and other actions, the EC once again fulfilled Kingwood regulatory requirement for education points.

In 2023, Kingwood will be designated a Tier A municipality (as will all other Tier B municipalities in the state). While the township will have additional requirements under the revised regulations, the EC acknowledges that these actions will improve water protection. For more stormwater information, visit <https://cleanwater.nj.org/>

Recycling and Clean Communities Litter Clean Up Program



Michele Tipton-Walters, Kingwood Township Deputy Clerk, is the new Recycling Coordinator and Michael Ewing, Kingwood Township Department of Public Works, is the new Clean Communities Coordinator. The EC expressed thanks to Sandra McNicol for her hard work and many years of service as both the Recycling and Clean Communities Coordinator.

All trash haulers serving the Township of Kingwood are required by New Jersey law to offer recycling to each household where they collect trash. Recyclables are placed curbside and collected through the service. Residents follow their guidelines on what can and cannot be recycled as the Township is served by a number of different haulers who are able to recycle only certain materials depending on the end market. In addition to curbside recycling, the Hunterdon County Transfer Station/Recycling Depot, 10 Petticoat Lane, Annandale, NJ, Phone: (908 236-9088) is open Monday through Friday for Hunterdon County residents for recyclables that cannot be managed curbside. Check the Hunterdon County website under “[Recycling](#)” for more details.

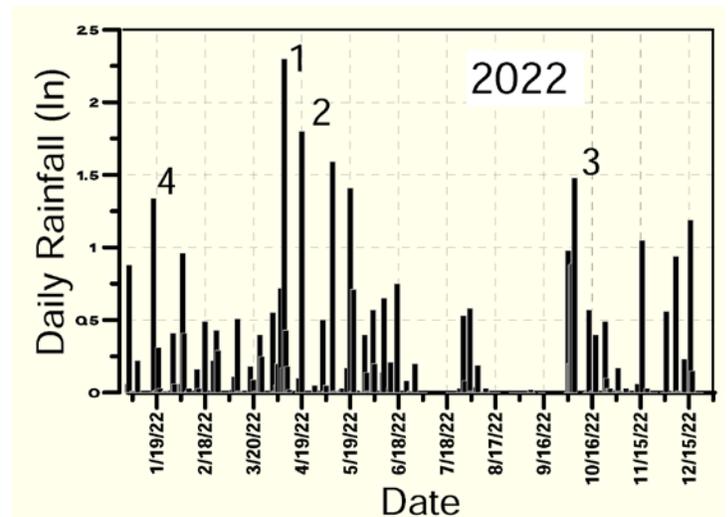
A metal recycling dumpster located at the Township of Kingwood DPW, 255 Union Road continues to be available to residents to drop off used metal items. Access is Monday through Friday from 7:00 am to 3:00 pm.

Two clothing recycling sheds are available to residents in the Township. One is located on County Route 519 at the Our Lady of Victories Church in Baptistown for drop off and another was added to the Kingwood Township Volunteer Fire Company site. Please bag only clean, usable clothing and shoes.

A number of non-profit organizations participated in roadside litter clean ups this year.

CoCoRaHS - Community Collaborative Rain, Hail & Snow Network

EC member Gail Ashley has been recording rainfall data (Station NJ-HN-22) for the last 13 years as part of the CoCoRaHS Project. This is a national network of volunteers who collect daily data of rain, hail and snow using standardized measuring equipment. The data are posted to www.cocorahs.org. The graph below is a record of precipitation in Kingwood Township for 2022, plotted as daily rainfall. Four exceptionally high rainfall events occurred: (1) 4/8/22 (2.3”); (2) 4/19/22 (1.8”); (3) 10/5/22 (1.5”); and (4) 1/17/22 (1.34”). As a comparison, Hurricane Ida Sept 1-2, 2021), a category 4 Atlantic hurricane dumped 7.6” rain on Kingwood causing significant erosion to stream channels and roadways. The total rainfall for the year was 46.7”, which is about average, but occurred in fewer, more intense, precipitation events.



NJDOT Rockfall Mitigation

In 2019, NJ Department of Transportation informed the township of their plans to mitigate the Delaware River cliffs for safety reasons. Although one large rockfall occurred in 2014, and small to medium rocks have fallen onto Route 29, almost always on the shoulder, NJDOT has no records of accidents caused by rockfalls in Kingwood.

The EC maintains that NJDOT’s plans for the rockfall mitigation on Delaware River Scenic Byway on Route 29 are unjustified, excessively damaging, and fiscally irresponsible, and argues for a much reduced project.

The EC worked with the Township Committee and a community group called DevilsTeaTableAlliance.org to pressure NJDOT to work with Kingwood and other stakeholders to craft a less impactful alternative.

Working with Parks and Recreation

One EC member is also on the Parks and Recreation Committee. Most of the invasive Callery pears at Kingwood Park were replaced with native trees.

Kingwood Environmental Commission members hold regular stewardship days at local parks to maintain tree plantings and care for the rain garden at the municipal park. In 2022, members worked at Horseshoe Bend Park to remove invasive species along trails.

Working with the Board of Health

The EC worked with the Board of Health to revise the township's well ordinance to revert most of the changes that had been adopted in 2021 to the requirements that had been in effect prior to 2021. The BOH adopted the changes on March 16, 2022.

Kingwood's ordinance establishing the EC charges the EC with advising the other committees and boards of the township on resource use and protection. Current members of the EC had worked from 1995 to 2010 to get a well ordinance adopted by the BOH. The EC found out in March 2021 that the well ordinance had been revised, and discovered that the substantial revisions diminished the stringency, were inconsistent, and not protective of our ground water resource.

Kingwood Township is not typical of other New Jersey areas as it is underlain with dense bedrock that in general has few fractures to store ground water, has slow infiltration and recharge rates, and a substantial amount of runoff. In times of low rainfall, wells are at risk of running low. For these reasons, the EC advocates for strong protection and conservation of our ground water resource. To accomplish this, the EC appointed a member to a well ordinance subcommittee to meet at a future date with appointees from the Planning Board and Board of Health. The subcommittee is intended to enhance communication among the EC, BOH and PB.

Other

Membership in ANJEC: The EC renewed annual membership in ANJEC, which provides resources such as a quarterly newsletter. Several EC members attended the ANJEC annual Environmental Congress.

William Lindsay White House: EC members discussed how the township's open space tax needs to balance the use of limited funds for restoration of historic sites as well as preserving land and stewardship of preserved land. Considering the maintenance needed, and the interesting historical significance of the house, the EC wrote a memo to the Township Committee supporting the use of funds as match of a NJ Historic Trust grant that the Township had applied for.

DeRewal Chemical Company Superfund Site 5th Five-Year Review Report was received and reviewed. The site is located between Rt. 29 and the Delaware River. From 1970 to 1973, the DeRewal Chemical Company improperly stored and spilled chemicals, including a spill of ~5,000 gallons of highly acidic chromium solution. Remediation of the soil was completed in 1998, but groundwater extraction, treatment, and monitoring continues. Further information can be obtained at <https://www.epa.gov/superfund/derewal-chemical>.

Kugler Woods: It was observed that people were parking by the Kugler Woods Trail entrance and not in the proper parking area. EC members suggested moving boulders in front of the entrance to deter parking there.

D&R State Park revealed plans for a 180-car parking on the former Cooley property on Route 29. The EC members discussed issues, but the State Park allowed no opportunity for public comment.

Dog park mowing: The EC reiterated that mowing at the Dog Park should be delayed until after July 15. Several threatened bird species such as bobolink, grasshopper sparrow and meadowlark use the dog park area as a breeding ground. Surprisingly, the presence of dogs does not seem to interfere with the breeding birds.

Began reviewing Chapter 15, the ordinance defining EC responsibilities for clarification on overlap with other township committees.

Conservation easements: Discussion of inventorying the conservation easements within Kingwood.

Contact the EC: os-ecsecretary@kingwoodtownship.com

Environmental Commission Information:

<https://kingwoodtownship.com/boards/environmental>

Environmental Documents and Topics:

<https://kingwoodtownship.com/government/forms/environmental>

The EC meetings continued to be held virtually and will continue virtually in 2023.

2022 Kingwood EC Members

Debbie Kratzer (Chair)
Gail M. Ashley
Timothy Cahalin
Ralph Celebre

Mara Tippet (Vice-Chair)
Sandra McNicol
Lois Voronin

Secretary: Debbi Hutton
Governing Body Member: Maureen Syrnick
Alt. #1: Cynthia Niececki
Alt. #2: Elizabeth Combs