

***ENVIRONMENTAL ADVISORY COUNCIL***  
***AGENDA***  
***Wednesday, September 17, 2025 – 6:00 PM***

*Radnorshire Room*

**1. Call to Order**

**2. Review/Approval of Minutes**

2.a. Environmental Advisory Council - August 20, 2025 Meeting Minutes

[Minutes August 20 2025 EAC Meeting.pdf](#)

**3. Public Comment**

**4. Announcements**

• **Fenimore Woods Park Improvements Project – Stable Renovation Starting Soon!**

- In addition to the fencing improvements taking place around the park, the stable will be renovated into park restrooms and storage. The park pavilion replacement will also start in mid-fall.

- *Important Notice to Park Users:* We kindly ask that all park visitors observe and adhere to posted signage, fencing, and established area closures as various phases of the project continue to unfold. Please contact Tammy Cohen, Director of Parks & Recreation, at [tcohen@radnor.org](mailto:tcohen@radnor.org) or 610-688-5600.

• **Wayne Business Association Fall Festival Sunday September 21, 12pm-4pm**

• **Delaware County Household Hazardous Waste Collection Events**

Saturday Oct 11, Upper Chichester Municipal Bldg, 8500 Furey Rd, Upper Chichester PA 19061  
Registration Required. Register at [delcohhw.eventbrite.com](https://delcohhw.eventbrite.com)

• **Radnor Conservancy Treefest (Tree Give Away and Fundraiser) on October 26th at the Willows.**

• **Villanova University’s Center for Biodiversity and Ecosystem Stewardship will host the Local Roots Seminar** on November 5th at Villanova University; details forthcoming.

• **Shredding and Drug Takeback Event** – Saturday Nov 8th 9 AM-Noon; Main Line Health Newtown Sq, 3855 W Chester Pike Newtown Square

• **Owl Encounter & Night Hike at the Willows**

- The Willows Mansion & Skunk Hollow Trails

- Friday, November 14, 2025 Rain Date: 11/15/25, 7:00 PM - 9:30 PM

- Registration opening soon. Please email [recreation@radnor.org](mailto:recreation@radnor.org) to be added to our program interest list.

• **WBA Fall Festival September 21, North Wayne Ave, 1-4 PM**

## 5. Ongoing Business

### • Municipal energy conservation and electrification

*Electric Vehicle Charging Stations* - Sven estimated that use of electricity instead of gasoline to power the Township EVs avoided 7.7 metric tons of CO<sub>2</sub> from 3/1/2025 to 8/18/2025!

*2026 EV Purchases*

*Township/PW Roof Upgrades and Solar Panel Installation Project*

*Township/PW Building LED Design and Upgrade*

*LED streetlight installation*

*Township/PW/RAC Building Benchmarking*

### • Public Education

*Radnor EAC Lecture Series*

Scheduling of fall/winter lectures is underway. NOTE: Future EAC Lectures at the Township Building will also be live-streamed on Zoom.

- *Right after this meeting*, Joyce Platfoot, Exec. Dir. Radnor Memorial Library will talk about the RML Seed Library.

- *Thursday November 13* at 6 PM Mike Weilbacher: Our Fungal Future: How Mushrooms Will Save the World.

*The Radnor News Community Newsletter (fall)*

- PennEnvironment factsheet on the health hazards of gas leaf blowers

- Leave the Leaves; alternatives to leaf removal

*Suburban Life (fall)*

- 'Go Wild in Your Backyard, Square Foot by Square Foot'

### • Promoting native plants and sustainable landscapes

*New ideas*

- Beech Leaf Disease
- "The Mosquito Bucket Challenge"
- "Leave the Leaves: alternatives to leaf removal"
- "Fall Planting: the best time to plant is now"
- "Using the 3-3-3 Rule to Mulch your Trees"; avoid mulch volcanoes and tree moats
- "The Invasive Eleven; common invasive plants to avoid in your yard:
  1. English ivy
  2. Japanese barberry (ticks)
  3. Butterfly bush
  4. Privet
  5. Orange daylilly
  6. Winged Euonymus ('burning bush')
  7. Japanese pachysandra
  8. Japanese and Chinese wisteria
  9. Norway maple
  10. Periwinkle vines (Vinca major and minor)
  11. St Johns Wort (poisonous to animals)

*Fall stream water sampling event for salt content*

*Eco-Friendly Yard Award program*

*EAC community survey*

*Seed library at Radnor Memorial Library*

*Garden/nature club at local elementary schools*

*Maintenance of rain gardens in the Township*

*Fenimore Pond algae overgrowth*

• **Gas leaf blower (GLB) phaseout**

6. **New Business**

- **Municipal ordinance regarding grass height**
- **Aronimink Golf Club clear-cutting 9 acres for a temporary PGA Broadcast Center**
- **Recycling and waste management in Radnor Township**
- **Promoting use and generation of electricity from solar and wind energy**
- **Budget**

EAC budget proposal for 2026 is \$15,000.

For 2025, the EAC was funded \$7,246.50.

2025 Current expenses:

- \$500.00 (RML seed library)
- \$200.00 (Santoro honorarium)
- \$300.00 (Weilbacher honorarium)
- \$3,971.50 (perennial plants, New Moon Nursery)
- \$250.00 (Mike Cranney honorarium)
- \$200.00 (Forsyth honorarium)

\$5421.50 current total expenses

**\$1825.00 current balance**

Pending 2025 expenses:

- \$156.15 for native perennial seeds from American Meadows.
- \$250 for 10 STEELS books on environmental sustainability and stewardship for the Townships 5 school district libraries.

7. Addenda

7.a. Addenda to September 17, 2025 Agenda

[Agenda Addenda.pdf](#)

**RADNOR TOWNSHIP ENVIRONMENTAL ADVISORY COUNCIL**

**Minutes**

**Wednesday, August 20, 2025 – 6:00 PM**

**Radnorshire Room**

**Attendees:** Bess Yates, Carol Jane, Sven Dethlefs, Donnelle Jageman (via Zoom), Daniel Burnham (minutes)

**Review/Approve Minutes** from May 21 and June 18, 2025 meetings

The minutes from both meetings were approved by the quorum of 5 attendees.

**Public Comment**

Laura Luker of Radnor Birdtown and Radnor Conservancy offered to provide input during discussion of agenda items below.

**Announcements**

- **Radnor Twp Parks and Recreation Dept:**

- *Wilderness Navigation with Hiking Hound Adventures*

Youth & Adults Ages 12+

Session 3: Sept. 17, 6:00-7:30 PM

The Willows Park & Skunk Hollow Trails

Learn more @ [hikinghoundadventures.com](http://hikinghoundadventures.com)

Register @ [radnorrecreation.com](http://radnorrecreation.com)

- Owl Encounter & Night Hike at the Willows Mansion 7:00 PM - 9:30 PM, Nov 14th (rain date 11/15).

Join us for a live owl program at the Willows Mansion followed by a night hike along a portion of the Skunk Hollow Trails to call for owls on Friday, November 14th (rain date 11/15). Registration opening soon. Email [recreation@radnor.org](mailto:recreation@radnor.org) to be added to the interest list. Limited number of spaces available.

- **Wayne Business Association Fall Festival** - Sunday September 21, 12pm-4pm

All 5 attendees voted for attending the festival.

**ACTION: Donnelle** has prepared a EAC sign up sheet for 1-2 hour timeslots between 11 AM and 4 PM.

Time Slot	EAC Member 1	EAC Member 2
Set-up @ 11 AM to 1 PM	Dan	
1 PM to 3 PM		
3 PM to 4 PM Breakdown	Dan	

**ACTIONS** for providing items for the table:

- Canopy, EAC banner, chairs, educational materials: **Dan**

- lemonade served with paper cups: **Dan**

- perennial native plants in compostable pots: **Dan** (Redbud Nursery in Media)

- ~30 locally grown apples: **Donnelle** (tentatively)

- seed packets from the Radnor Library native seed library: **Sven**

- electric leaf blower: **Sven**

- Birdtown information – **Laura Luker**

- the PennEnvironment factsheet on gas leaf blowers: **Bess** to modify the factsheet in Addendum I so it relates PM2.5 emissions for Delaware County instead of Montgomery County:

“ Delaware County ranked 17th out of all 67 PA counties in mean fine particulate (PM2.5) air concentration between 2021 and 2023 (<https://datacommons.stanford.edu/place/geoId/42045>)

- **Shredding and Drug Takeback Event** – Saturday Nov 8<sup>th</sup> 9 AM-Noon; Main Line Health Newtown Sq, 3855 W Chester Pike Newtown Square
- **Delaware County Household Hazardous Waste Collection Events**
  - Saturday Sept 6, Emergency Services Training Center, 1600 Calcon Hook Rd, Sharon Hill PA 19079
  - Saturday Oct 11, Upper Chichester Municipal Bldg, 8500 Furey Rd, Upper Chichester PA 19061

Register at [delcohhw.eventbrite.com](https://delcohhw.eventbrite.com)
- **Radnor Conservancy Treefest** (Tree Give Away and Fundraiser) on October 26th at the Willows.
- **Villanova University's Center for Biodiversity and Ecosystem Stewardship** will host the Local Roots Seminar on November 5th at Villanova University; details forthcoming.
- **Electronics Recycling Day; Anything with a Plug**; this fall; last year at Radnor Financial Center
- **The EAC Fall Gathering** will be hosted by the Chester County Planning Commission during the first part of November. Date and location details are forthcoming. It will be a 1-day, in-person training & networking event for EAC members, municipal staff & elected officials.
 

**ACTION:** Laura Luker requested that EAC members complete the WeConserve Fall Gathering Agenda Input Survey. See: [https://lp.constantcontactpages.com/sv/JajylkO/EACfallagenda2025?source\\_id=6ff18c20-6dc6-42b6-ab83-24291fff0d93&source\\_type=em&c=L5mdQGZcD5vYb7B1jEClbkEiNPIQ3nSXWoCRhuDCxadytFYn7K7xw==](https://lp.constantcontactpages.com/sv/JajylkO/EACfallagenda2025?source_id=6ff18c20-6dc6-42b6-ab83-24291fff0d93&source_type=em&c=L5mdQGZcD5vYb7B1jEClbkEiNPIQ3nSXWoCRhuDCxadytFYn7K7xw==)
- **The Radnor Township Comprehensive Plan** was adopted in April, 2025.
 

Laura Luker recommended that council members review sections concerning the EAC. See: <https://www.radnor.com/home/showpublisheddocument/24990/638864499690700000>

**ACTION:** EAC members review tables starting on page 194 where the EAC is listed with other Township departments/committees in achieving Environment/Open Space and Sustainability Resilience and Infrastructure objectives.

## Ongoing Business

- **Municipal energy conservation and electrification**

### *EV Charging Stations*

The EV Charging Stations were installed earlier this spring.

**ACTION:** Dan to obtain Engineering Department report for the EV charging station and convert how much gas/CO2 has been saved from 3/1/2025 to 8/18/2025.

### *2026 Electric Vehicle Purchases*

The Township is currently reviewing the 2026 vehicle list for EV options.

### *Township/PW Roof Upgrades and Solar Panel Installation Project*

The bids received on 7/9/2025 were rejected by the Board of Commissioners on 8/18/2025. See attachment for more details. The project is scheduled to be rebid later this week and bids opened on 9/11/2025.

### *Township/PW Building LED Design and Upgrade*

The design and upgrades are expected to occur later this year into next year.

### *LED streetlight installation*

Radnor Township has received PECO Rebate for LED Streetlights.

### *Township/PW/RAC Building Benchmarking*

Work is continuing with DVRPC to finalize Township building energy benchmarking utilizing Energy Star Portfolio Manager and PECO Energy Usage Tool.

- **Public Education**

*Radnor EAC Lecture Series:*

- ‘Creating and Maintaining Edible Landscapes ‘ Phil Forsyth from the Philadelphia Orchard Project - Tuesday, September 16, 6 PM [Virtual]

**ACTION: EAC members** to suggest topics for fall and winter lectures.

Carol arranged the 7~8 PM slot after our EAC meeting on Weds Sept 17 for an EAC lecture by Joyce Platfoot, Exec. Dir. Radnor Memorial Library on the RML Seed Library.

**ACTION: EAC** to confer with Joyce about replenishing their seed inventory through direct purchasing with EAC 2025 funds and organizing a small tutorial on seed harvesting.

**ACTION: Dan** to email Mike Weilbacher about presenting two talks this fall: The Buzz About Bees: Pollinators in Peril and Our Fungal Future: How Mushrooms Will Save the World. Other possible sources for speakers include Gretchen Groebel of Willistown Conservation Trust and the Government and Community Relations department at Villanova University.

**ACTION: Laura Luker** to contact colleagues in Radnor Conservancy and/or Shade Tree Commission concerning a possible talk about plant, shrub, and/or tree care and diseases

#### *The Radnor News Community Newsletter*

‘The EAC Eco-Friendly Yard Program’ appeared in the summer issue!

Carol suggested that the PennEnvironment factsheet on the health hazards posed by gas leaf blowers be posted in the fall Newsletter.

**ACTION: Bess** is modifying the PennEnvironment factsheet to specify Delaware County particulate air pollution (see Action above).

**ACTION: Bess** to find out from Edward Watton the deadline for submitting articles this fall.

#### *Suburban Life*

‘Go Wild in Your Backyard, Square Foot by Square Foot’ will appear in the fall issue

- **Promoting native plants and sustainable landscapes**

- *New ideas*

- Emerald ash borer, Beech Leaf Disease
- "The Mosquito Bucket Challenge" <https://homegrownnationalpark.org/mosquito-bucket-challenge/>
- "Leave the Leaves: alternatives to leaf removal"
- "Fall Planting: the best time to plant is now"
- "Using the 3-3-3 Rule to Mulch your Trees"; avoid mulch volcanoes and tree moats ([bygl.osu.edu/node/1494](http://bygl.osu.edu/node/1494))
- "The Invasive Eleven; common invasive plants to avoid in your yard:

**ACTION: Bess and Sven** to place the above 6 ideas in order for publication this fall/winter (with ideal dates) and create 1-2 headline sentence for each with informational URL for Molly Gallagher to post on township webpage(s) and social media.

- *Stroud Water Research Center fall stream water sampling event*

By analyzing water samples from local streams collected this fall between rainstorms, this effort is expected to illustrate the year-round presence of road salt contamination in our watersheds, and use these data to help bring the pervasive salt pollution issue more into the public eye. Road salt is an especially local issue because private applicators and municipalities are major sources, and this means that local data are important if not vital in this conversation.

All 5 attendees voted in favor of supporting this stream water sampling event through personal participation or recruiting volunteers.

**ACTION: Dan** to inform Cindy Mehallow of the Newtown Twp EAC of our interest, ccing Gretchen Groebel of Willistown Conservation Trust which participated in the event last

year, and Amber Atwood-Levy of Radnor Conservancy who may be able to recruit volunteers.

**ACTION: Bess** to see if Radnor school students could volunteer.

**ACTION: Dan** to learn from participants from other townships which deicer is used on roads.

◦ *Debriefing: EAC native plant giveaway April 26*

Sven has obtained email addresses of registrants from Melissa Conn. He suggested that the registration form next year have a QR code for funding purchase of more plants. He also noted that about 25% of perennials planted in the municipal parking lot a year ago re-emerged with the wet summer!

Bess indicated that Radnor School District is interested in more native perennial plant beds.

Sven and Bess suggested that residents/schools provide pictures of their perennial beds for posting on the Township online News, social media, etc as a followup promotion of the native plant giveaway.

So as to allow time for the perennial plugs to grow more before planting, Sven suggested we purchase the plugs 1 week later from New Moon Nursery and have the giveaway in the first week of May instead of late April.

**ACTION: Dan** to ask Amber Atwood-Levy of Radnor Conservancy whether the EAC could help with their Treefest (Tree Give Away and Fundraiser) on October 26th at the Willows.

**ACTION: EAC** to consider a native perennial plant giveaway in the fall of 2026, budget allowing. Fall is good time to plant perennials with cooler temperature and more rain; see [https://www.bbg.org/article/ask\\_a\\_gardener\\_can\\_i\\_plant\\_perennials\\_in\\_the\\_fall](https://www.bbg.org/article/ask_a_gardener_can_i_plant_perennials_in_the_fall).

A smaller plant giveaway this fall for schools and institutions was proposed by Bess, but will require immediate time commitment during one of the busiest times of the year. Discussion on-going.

◦ *Eco-Friendly Yard Award program*

The total number of awardees over the past 2 years is 31!

◦ *EAC community survey*

Sven and Bess: a township-wide survey of homeowners is proposed to understand:

1. The level of interest in planting of native plants trees on private and public land.
2. The number of trees removed in the past 2 years and the replacement rate.
3. The interest in a regulation limiting the use of gas powered leaf blowers

A general environmental related survey was conducted by the EAC in early 2023. The survey questions had to be approved by the BOC. The EAC (Donnelle) produced and created the online survey, and summarized/presented the survey results. The Township promoted the survey on its website, e-news blast, e-newsletter and social media.

**ACTION: Sven** to resend the 10-question survey for EAC review before submitting to the Board of Commissioners.

**ACTION: Sven** to inform Shade Tree Commission regarding the survey and get their input. Also determine the shortfall in number of trees that were available for donation at their most recent Annual Community Tree Planting and Annual Street Tree Planting Programs.

◦ *Seed library at Radnor Memorial Library*

The 7~8 PM slot after our EAC meeting on Weds Sept 17 is available for an EAC lecture by Joyce Platfoot, Exec. Dir. Radnor Memorial Library (see above).

◦ *Garden/nature club at local elementary schools*

All 5 attendees approved that the EAC donate \$250 for 10 STEELS books on environmental sustainability and stewardship for the Townships 5 school district libraries (2 books per school).

**ACTION: Bess** to arrange payment with Melissa Conn.

- *Maintenance of rain gardens in the Township*

Tammy Cohen, Director of Parks and Recreation, responded August 17 that restoration of the 7 rain gardens was not funded for 2025. The hope is funding will be available next spring. She still plans to have a leadership point person on behalf of the Township to facilitate and manage the training and program for volunteer maintenance, but presently does not have a such a person and Public Works personnel are not available to take on right now.

- *Fenimore Pond algae overgrowth*

Last year a professional firm essentially ‘skimmed’ the pond’s top surface to remove floating algae and any subsurface vegetation. Removal of this ‘blanket’ provided much-needed relief, albeit a short-term fix. Once the warmth settled back in, the issue presented itself again. It’s important to note: The real issue lies subsurface where the water volume is shrinking due to the amount of organic sediment that has collected over the years. This pond has also been here since the late 1800s.

Tammy Cohen is planning to have a surface algae skim performed again this fall and also working to evaluate the removal of subsurface accumulated sediment, debris, and aquatic vegetation of which is desperately needed especially in the western half of the pond which is the shallowest.

Tammy is also working with a contractor to look into algae identification and testing for phosphorus. Pending findings, they also have a treatment program that would be formulated based on nutrients found in the water which primarily drive algae and aquatic weed growth. The Algae survey would also help determine if there are any potential harmful algal blooms present or known HAB toxin producers.

Additional considerations include working on the stagnant water flow into and within the pond and evaluating whether the adjacent weir could be restructured to allow more positive water flow and infiltration into the pond. And also, once pond sediments depths are reduced, add aeration equipment to increase water flow and oxygenation (i.e., water fountains). Right now, water fountains are not feasible due to the amount of muck that would cause clogging.

- **Gas leaf blower (GLB) phaseout**

All 5 EAC attendees voted in favor of the preparation for the Board of Commissioners a GLB health impact summary and a proposal outlining a seasonal (ie, summer) ban on GLBs for all Township sectors.

**ACTION: Dan** draft a document for EAC review by early September.

Vila, Paloma Lower Merion Township Sustainability Manager, reported on August 4 that LMT Staff plan to bring a leaf blower ordinance to a Board of Commissioners Sustainability Committee meeting in September “for information only”. After that, there will be three opportunities for public comment: October 8th Sustainability Committee meeting (authorization to advertise); October 22nd Board of Commissioners meeting (authorization to advertise); November 19th Board of Commissioners meeting (consideration to adopt).

Two local GLB seasonal bans:

February 2021: Maplewood NJ *late spring/summer* GLB ban: The law banned use of gas-powered blowers from May 1 to Sept. 30 each year by both residents and businesses. During the rest of the year, machines were banned on Sundays, and could only be used during certain hours the rest of the week (Mondays through Fridays the blowers could be used from 8 a.m. to 6 p.m., Saturdays from 10 a.m. to 5 p.m.). Emergency use after a storm or natural disaster was permitted. In 2023, Maplewood passed a *year-round* GLB ban. [file:///C:/Users/Daniel%20Burnham/Downloads/16530751117832%20\(2\).pdf](file:///C:/Users/Daniel%20Burnham/Downloads/16530751117832%20(2).pdf)

In October 2021, Princeton NJ *seasonal* GLB ban: GLBs were fully prohibited in Princeton NJ from December 16 to March 14 and May 16 to September 30. Use is allowed March 15 to May 15 and October 1 to December 15 during the following specified times: 8:00 am-8:00 pm Monday, Fridays; 8:00 am-5:00 pm Saturdays. Use on Sundays and Thanksgiving is prohibited. Emergency use after a storm or natural disaster is permitted. <https://www.princetonnj.gov/1239/Landscape-Maintenance-Regulations>

In July, Robert Tate, Director of Finance, responded to Dan that the Workers Compensation program for the Township Dept of Public Works has recognized for some time the health hazards posed by GLBs, resulting in the use of PPE to protect workers from potential damages.

- **Aronimink Golf Club clear-cutting 9 acres for a temporary PGA Broadcast Center**

Dan reported that the tree-clearing was completed in July and stormwater containment features are being built.

- **Recycling and waste management in Radnor Township**

No updates.

- **Promoting use and generation of electricity from solar and wind energy**

Dan noted that the national spending bill signed on July 4 will phase out tax credits for wind and solar powered electricity generators. Under the new law, projects would likely need to start construction within the next year — roughly by July 2026 — to have the best chance of getting the full credit. Bess noted that PA is still promoting installation of solar panels.

Tax credits worth up to \$7,500 to buy a new or used electric car will end by Sept. 30, 2025. Although, a tax credit could also still be claimed by anyone adding large batteries to the grid,

## **New Business**

- **Municipal ordinance regarding grass height**

In July, Sven noted that a neighbor had to mow his nascent meadow to be compliant with Township code:

“The Township enforces the International Property Maintenance Code. Weeds and plant growth (other than cultivated flowers and gardens) may be no taller than 12 inches.”

<https://www.radnor.com/government/departments/community-development/frequently-asked-questions>

Laura Luker suggested that the EAC consider the WeConserve Model Naturalized Landscape Ordinance, a tool for achieving a balance between weed ordinances serve to combat problems associated with neglect and the desire to encourage landowners to embrace ecologically beneficial landscape practices. The model has benefited from peer review but will remain labeled as draft until WeConservePA collects and considers additional comment. Please send comments ASAP to Justin Hollinger at [jhollinger@weconservepa.org](mailto:jhollinger@weconservepa.org). Though labeled "draft," the model is suitable for adaptation and adoption by municipalities now.

[https://library.weconservepa.org/library\\_items/2434-Model-Naturalized-Landscape-Ordinance-with-Commentary](https://library.weconservepa.org/library_items/2434-Model-Naturalized-Landscape-Ordinance-with-Commentary)

## **Budget**

All 5 EAC members voted in favor of a budget request for 2026 of **\$15,000**:

- \$1500 for honoraria, general supplies
- \$8000 for a Fall and Spring native perennial plant giveaways (purchase about 5000 plants)
- \$500 for replanting perennial plants in the municipal parking lot (purchase about 300 plants)
- \$3000 for a biodiversity-garden in a highly visible location (eg, Route 30, business district, or library), inspired by the Vision for Radnor in the 2025 Comprehensive Plan (purchase of plants and trees)
- \$2000 for Radnor school gardens

**ACTION: Dan** to submit budget request to Cathy Agnew and Melissa Conn.

For 2025, the EAC was originally funded \$3275.00, and later awarded another \$4000.00 for the perennial plant giveaway. Total amount funded in 2025: **\$7,275**

Current 2025 expenses:

- \$500.00 (RML seed library)
- \$200.00 (Santoro honorarium)
- \$300.00 (Weilbacher honorarium)
- \$4000.00 (perennial plants, New Moon Nursery)
- \$250.00 (Mike Cranney honorarium)
- \$150.00 (WBA Fall Festival Sept 21 2025)

\$5400.00 current total expenses  
**\$1875.00 current balance**

-\$200.00 (Forsyth honorarium in Sept) = \$1675.00 pending balance

In addition, Sven has proposed that the EAC talk to the Township Shade Tree Commission to see if the tree planting budget to replace the loss of tree canopy can be increased. He could not find a budget line for tree planting.



# Pennsylvania

## The Impacts of Gas-Powered Leaf Blowers and Lawn Equipment

### AIR

Gas-powered leaf blowers, especially those with two-stroke engines, emit large amounts of air pollution including: fine particulate matter (PM2.5), nitrogen oxides (NOx), and volatile organic compounds (VOCs). These are linked to health problems including asthma attacks, reproductive issues, mental health challenges, cancer, and even premature death.

### CLIMATE

Gas-powered leaf blowers are a significant source of carbon dioxide, which contributes to global warming. Using a gas-powered leaf blower for just one hour emits as much pollution as driving from Pennsylvania to Florida.

### NOISE

The noise from gas-powered leaf blowers is linked to hearing loss, increased agitation, and cardiovascular issues.

### Electric Alternatives

The good news is that we have better alternatives at our fingertips: electric leaf blowers are increasingly easy to find at major hardware stores and suppliers, with dozens of options currently on the market. Electric leaf blowers are cleaner, quieter, and easier to use. These electric alternatives are often just as capable as the fossil fuel versions and, over a lifetime of use, are often cheaper.

### By the Numbers

Emissions from Lawn and Garden Equipment, 2020	Tons of Emissions	Equivalent Emissions from Number of Cars
Nitrogen Oxides (NOx)	2,913	1,302,837
Carbon Dioxide (CO2)	1,149,423	10,358,520
PM2.5, Primary	965	253,034

### PA Ranked:

**4th worst in US for PM2.5, 5th worst for VOCs, and 6th worst for NOx and CO2 emissions**  
**Montgomery Co. ranked 20th worst in nation for PM2.5 emissions out of more than 3,100 counties**



From Lawn Care Goes Electric Report by PennEnvironment Research & Policy Center

1528 Walnut St., Suite 1400  
Philadelphia, PA, 19102

[pennenvironment.org](http://pennenvironment.org) | [ellen@pennenvironment.org](mailto:ellen@pennenvironment.org)



**Addendum II**  
**Delaware County Sustainability Conference**  
**June 9, 2025**

**How Maplewood NJ Banned Gas Leaf Blowers [webinar]**

**Mayor Nancy Adams**

Maplewood is a Township in Essex County, NJ. As of 2020, the township's population was 25,684 (Radnor Twp 32,000), which is situated in only 3.87 square miles (Radnor Twp is 13.8 sq mi).

Maplewood is governed with a five-member Township Committee. The Township Committee is elected directly by the voters. The Township Committee selects one of its members to serve as Mayor for a one year term. The Mayor is considered the head of the municipal government.

The Township Committee has the responsibility for passing laws that affect the Township. The Township Committee is also an executive body that sets policy and overall direction for the Township.

Since January 2023, Maplewood has successfully banned use of gasoline leaf blowers (GLBs) by residents and commercial landscaping companies.

Key takeaways from Mayor Adam's talk:

**1. The GLB ban was introduced gradually after a noise ordinance.**

- In 2016, a pilot resolution was passed for a township-wide summer ban of electric and gas leaf blowers used by commercial landscaping companies between June 1 and August 31. It was meant to address resident complaints of the noise pollution created by the blowers used by professional landscapers. It made more stringent a 2003 township *noise ordinance* that only banned all leaf blowers above a certain decibel rating (65 dB). This ordinance was found to be too difficult to enforce.
- The experience with the pilot summer ban was largely positive, so they formed a township subcommittee to oversee the issue, which Adams chaired. In the fall 2016-winter 2017, the subcommittee *surveyed commercial landscapers* to learn their feedback regarding the ban.
- In the spring of 2017, the township enacted a broader seasonal ban whereby GLBs were banned from May 15 through September 30. The ban still applied only to commercial landscaping companies. Outside the ban period, landscaping companies could only use GLBs Mondays to Fridays from 8 a.m. to 6 p.m., and Saturdays from 10 a.m. to 5 p.m. On Sundays, only residents could use leaf blowers from 11 a.m. to 5 p.m.

Gail Woolcott, the New Jersey Landscape Contractors Association's director of operations, told NJ Advance in April 2017 that it's difficult to quantify how much business the landscapers will lose as a result of the ordinance, but says they will be forced to use either battery-powered blowers, or rakes and brooms, which she estimated would quadruple the time they need to spend at each house, and inevitably raise prices. However, Woolcott also said that commercial GLBs are not used for leaves very often in the summer; they are used to clear fertilizer from driveways and walking paths. Adams maintains that, in reality, landscaping companies actually saved time and money, and there was not a decline in lawn appearance because the use of gas-powered leaf blowers was excessive.

- In October 2017, AGZA demonstration of commercial grade electric equipment.
- In January 2023, the township EAC with community leaders were successful in getting a total year-round ban of GLBs approved. The ban applies to both township residents and commercial landscaping companies. Aside from the blowing of leaves, grass clippings, and other lawn debris, all adapted uses for

gas-powered leaf blowers are prohibited, including but not limited to gutter cleaning and the application of products to treat insect infestation.

Both 2- and 4-cycle GLBs are banned, except for turbine blowers (“Buffalo Blowers”) which are large machines connected to a small tractor, golf cart or other vehicle and are much quieter than a conventional GLB. This new regulation followed the six-year seasonal ban and educational effort in response to reviewing scientific data which demonstrated that gas leaf blowers emissions, airborne particulates, loud noise, and powerful air currents negatively impacted our air quality and public health.

2023: First full year of the ban. Reduced number of weeks for spring rake out and fall leaf pickup. Weight of leaves picked up in 2023 was reduced due to change in how maintenance was done (mow-mulch leaves, blow into beds or woods).

2. **Enforcement of the ban required sizable fines.** Although the fine for violating the initial summer ban was \$100, some landscaping companies still used GLBs. Thus, in the spring of 2017, the fine was increased with enactment of the seasonal ban: \$500 for first violation, \$1000 for second violation, and \$1500 for subsequent violations.

Initially, residents called in violations to the police department, but in some cases these witness reports led to discovery of illegal immigrant workers. Also, the violator had often left the jobsite before police arrived. Subsequently, witnesses now submit photographs of the GLB and the landscaper’s license plate (+/- name) to a code enforcement website. So far, witnesses have not been called into court; companies would rather pay the fine rather than face the exposure of a court appearance. With time, landscapers have adapted to the total ban (Maplewood Case Study).

3. **Maplewood chose not to use financial incentives** for turning in GLBs and/or switching to electric leaf blowers. The township felt that landscaping companies and residents could adapt to the total ban, and that incentives shouldn’t be used to protect the health of residents.
4. **Maplewood’s seasonal GLB ban held up in court.** In 2017, an injunction against the ordinance was filed by the New Jersey Landscape Contractors Association. The plaintiffs stated:
  - The law doesn’t apply equally to all; residents and municipal workers are still allowed to use GLBs
  - Landscapers are forced to use "inefficient and time-consuming methods” like rakes, brooms and hoses in lieu of leaf blowers
  - The ban has affected their financial bottom line, causing “an adverse impact on business and goodwill”

Richard Goldstein, president of the New Jersey Landscape Contractors Association, says he has no objection to relying on electric blowers in the summer and winter. During the fall season, though, when workers at his company bag several hundred pounds of leaves each day, he says gas blowers are essential.

“In the fall, we have to run our blowers nonstop to clean everything up,” says Goldstein, whose company, Green Meadows Landscaping, is based in Oakland. “Electric doesn’t have the battery life.”

Transitioning to electric would mean retrofitting his trucks with chargers, he says, and running the diesel trucks to charge the batteries would trade one environmental problem for another. Plus, the client would end up paying for the new charging equipment and the transition to all-electric equipment through an increase in landscaping service prices, he says.

Rakes, which did the job for generations before leaf blowers were invented, are “cost prohibitive,” Goldstein says. “The price of the labor would kill you.”

Nevertheless, the lawsuit was dismissed primarily on the grounds that Maplewood had the right to protect the health of its residents. The township presented scientific data which demonstrated that gas leaf blowers emissions, airborne particulates, loud noise, and powerful air currents negatively impacted air quality and public health. As for the discriminatory nature of the ban, Maplewood in 2021 expanded the seasonal ban to apply to township residents and municipal public works departments as well as commercial landscapers.

5. **Landscaper contract costs have not risen.** Mayor Adams also indicated that the contract cost for a commercial landscaper apparently has not risen appreciably since enactment of the total ban in 2023. She ascribes the lack of financial impact to the greater cost of electric blowers and extra batteries being offset by the absence of gasoline costs and little if any cost of maintaining an electric unit. Also, companies could usually wait until their GLB wore out (usually after 2-3 yrs) before purchasing an electric unit. As for landscapers being forced to use ‘inefficient and time-consuming methods’ to clear leaves and debris, landscapers now save time by mowing the leaves and, when possible, blowing leaves into large tracts of bushes or forest. These new practices also save the township money by reducing the tonnage of curbside leaves that has to be picked up each fall.
  6. Lastly, Mayor Adams indicated that given the difficulty of banning GLBs at the municipal level, **banning GLBs, much less all gas lawn equipment, would be considerably more challenging at the state level.** Presently, ‘big oil’ is fighting the idea of a statewide ban. However, convincing stakeholders of the acceptability of a ban should become easier as commercial landscapers find they can adapt to using electric leaf blowers and more efficient management of fall leaves.
6. **New Jersey lessons learned**
- Community outreach an education essential: change landscaping ideals and practices; focus on quality of life/health
  - Start with your municipality: pilot elawn through DPW
  - Ordinances must target all sectors equally: limit lawsuits; avoid ‘no-Sunday’ laws
  - Limit exceptions or carve-outs to ordinance
  - Resident self-reporting of violations is effective
  - Be patient

**Addendum III**  
**Lawn Equipment Electrification Workshop**  
**June 17, 2025**  
**Ludington Library, Bryn Mawr, PA**

Lower Merion, Haverford, and Springfield Townships and Narberth Borough sponsored an electric lawn equipment hands-on learning exercise at the Ludington Library in Bryn Mawr. The event was organized by the American Green Zone Alliance (AGZA). About 30 personnel from local landscaping companies attended, along with Cathy Agnew, Ricky Foster and other colleagues of Radnor DPW and Dan.

Key takeaways:

Vila Paloma, Sustainability Director in Lower Merion indicated that the township is evaluating a township-wide seasonal ban on gas leaf blowers from May through September and maybe also winter and spring months. As you recall, the Maplewood NJ total ban started with a summer ban. As expected Vila is getting pushback from homeowners who dont want a ban or who want it to be year-round.

Thus, as stated by Mayor Adams of Maplewood, Vila emphasized that education of landscaping personnel and homeowners to the health hazards of gas leaf blowers is essential for community acceptance of any ban.

The main concern of landscapers was the short battery runtime of backpack leaf blowers (~40 min on full throttle). especially for leaf collection in the fall. Dan Mabe President of AGZA, like Mayor Nancy Adams of Maplewood, proposed this concern can be met by mulching leaves while mowing grass. Nevertheless, he admitted that battery technology isnt quite there for handling large amounts of wet leaves. On that note, however, I talked to a sales rep from Kress, which has a patented battery design whereby the battery doesnt heat up during use; charge time is only 30 min for their 660 Wh backpack blower battery because the battery doesnt have to cool down before charging. Thus, 2 batteries give 1 worker uninterrupted power.

Costs:

- backpack blower only: \$500;
- charger: \$800
- 240 wh 60 v battery \$500; 6-yr warranty 'best in business'
- 660 wh 60 v battery \$1300 6-yr warranty; \$1800 with backpac blower
- 1500 wh 60 v battery \$1600; 4-yr warranty

Other than backpack leaf blowers, runtime/charge doesnt seem to be a problem with walk-behind mowers and other small equipment that have small jobs. But even the large Mean Green zero-turn mowers can run 6-7 hours on a single charge, enough for one day's continuous work. The issue of course is the high cost of these large mowers.

I heard repeatedly that, with proper care, large batteries can last 5-7 years before the fall in charge capacity makes the battery unable to meet the demands of the job.

For those wanting to compare the pros and cons of different manufacturers, agza.net has a sub page 'AFTC' (AGZA Field-Tested Certified) that provides specifications, performance, and cost information for the major elawn manufacturers. There is a phone # to call to get more comparative information. Manufacturers will let companies try out their products for ~a week.

The lithium battery recycling industry is becoming more established as demand grows: you return the worn-out battery to the seller who sends them in bulk to the recycler (usually SE Asia) to recover the metals.