

Committee Members

Mary Knittle, Chair
Evelyn Herwitz, Vice Chair
Patricia Austin
Ted Conna
Nathan Fournier
Mary Leovich
Deirdra Murphy

Contacting the Committee

Department of Sustainability and Resilience Address: 455 Main Street, Room 108, Worcester, MA 01608 (by appointment) Email:GreenWorcester@worcesterma.gov

Website:

WWW.WorcesterMA.gov/GreenWorcester

Department of Sustainability and Resilience

Our Mission:

To implement the ambitious and urgent goals of the Green Worcester Sustainability and Resilience Strategic Plan (GWP), a roadmap for making Worcester the greenest mid-size city in the country.

Our Staff:

John Odell, Chief Sustainability Officer
Jacquelyn Burmeister, Lakes & Ponds
Program Coordinator
Jessica Davis, Project Manager
Robert DeFosse, Energy Services Manager
Sarah Mount, Energy Analyst
Nick Pagan, Senior Environmental Analyst
Luba Zhaurova, Director of Projects

Accessibility:

The GWAC is committed to ensuring that its public meetings are accessible to all. Should you require interpretation, auxiliary aids, services, translations, written materials in other formats, or reasonable modifications in policies and procedures, please contact the DSR a minimum of 48 hours in advance of the scheduled meeting.

Translations:

Hay disponibles servicios de interpretación y otras adaptaciones con solicitud previa. Avisanos por greenworcester@worcesterma.gov

CITY OF WORCESTER Meeting Minutes Green Worcester Advisory Committee

Tuesday, April 25, 2023 at 5:30 p.m. Location: Levi Lincoln Room, City Hall

Attendance

Present

Mary Knittle, Chair Evelyn Herwitz, Vice Chair Patricia Austin Ted Conna Nate Fournier Mary Leovich (online) Deirdra Murphy

Absent

None

Staff

John Odell Luba Zhaurova Sarah Mount

<u>Call To Order at 5:37 pm by Mary Knittle, Committee</u> <u>Chair</u>

- 1. Welcome
- 2. Approval of Minutes March 13, 2023
- i. The Committee voted unanimously to approve the March 13^{th} , 2023, meeting minutes.
 - 3. New Business

i. Presentation: Worcester Community Action Council (WCAC), Mary Knittle (Attachment A)

ii. Vice Chair Herwitz asked if the WCAC's work will overlap with the SMART energy advice program that the Department of Sustainability and Resilience (DSR) will be rolling out this year, or if the WCAC's focus on low-income residents will help these programs work in tandem. Chair Knittle responded that MassSave will refer low-income residents to the WCAC, which prevents overlap. She added that WCAC encourages conversations

- between landlords and tenants. The tenants are the group eligible for the rebates, but for energy efficient measures to be installed, landlords must approve of the projects. Mr. Odell responded that the city's Energy Advocates will emulate the WCAC, connecting folks to incentives and programs that already exist, but they won't focus exclusively on low-income residents.
- iii. Member Fournier applauded the WCAC's work and recalled his time as an energy auditor for the MassSave program. While he was an auditor, Member Fournier recalled that he was able to carry folks through the program, but he directed low-income folks to WCAC and didn't hear how their projects went after that. He was excited to learn how the program has grown recently. He also applauded how non-profits, utility companies, and the city are working together to provide a community need.
- iv. Member Conna called attention to the dilemma that if someone's heating system breaks down in the winter, they don't have heat. Installing air-source heat pumps takes more time than replacing like-for-like but installing like-for-like means people will have oil heat for 20+ more years. He does not love temporary heating as a solution, but it is an option. He asked how often, in this situation, the air-source heat pump gets installed. Chair Knittle responded that we are currently in a policy bubble. Previously there were supply chain issues, preventing the installation. Now that supply chains are steady, she said the best practices are being developed. She also added that these best practices are being developed for residents who need hot water heaters as well.
- v. Member Conna followed up, adding that electric space heaters filled with oil are safe, because they don't get very hot. He furthered that putting space heaters around a home is not a long-term solution, but they do work in the short-term. He lamented that in the winter, residents are likely to replace their heating system with what is easiest, not necessarily what is best, if there isn't a large driving force changing behavior. Chair Knittle explained that there is often a lot of deferred maintenance and that these projects are never as simple as you'd like. She added that policies are changing rapidly and the WCAC is prepping for all eventualities.
- vi. Member Conna asked if eligible low-income folks have their bills completely covered. Chair Knittle responded that there are benefit levels. The WCAC will pay one's bills up to a fixed dollar amount. The benefits are not percentage amounts. Member Conna lauded this method because it means that there is an incentive to conserve everyone has skin in the game. Chair Knittle noted that people occasionally see their total utility costs increase when they install heat pumps, and the WCAC is considering creating an incentive program for those who convert from gas/oil to heat pumps.
- vii. Member Conna reminisced on when there were different rates that incentivized people using energy during off-peak hours and added that it would be great to have a different rate if you have a heat pump because there is a social benefit. Chair Knittle responded that time-based incentives can disproportionately hurt low-income people because they have less flexibility in when they can do things, but she liked the idea of incentivizing people to do good things right on their electric bill. Chair Knittle brought up that these are multi-faceted issues, there are a lot of people working on advancing these policies.

4. Continued Business

- i. Update on Miyawaki Forest Pilot and MVP Grant
 - i. Ms. Zhaurova explained that the city is actively preparing an MVP grant application for up to five pilot Miyawaki Forest sites. The city has an idea where one of the sites will go and will seek community feedback when determining the locations of the other sites.
- ii. Urban Forestry Master Plan
 - Vice Chair Herwitz introduced the Urban Forestry Master Plan Draft that was published on the city's website earlier that afternoon. There are two opportunities for public comment next week: May 3rd at the Urban Forestry Tree Commission Meeting at 6pm at 50 Officer Manny Familia

- Way and May 4th at the Parks Commission meeting at 6:30 pm at Officer Manny Familia Way. The deadline for public response is May 16th. The main goals of the plan are plan and manage the city's public trees, proactively grow and maintain public trees, and preserve and protect the public trees and engage with the community.
- ii. Vice Chair Herwitz highlighted that the USDA Forest Service has just released a grant application funded by the Inflation Reduction Act. The Forest Service has offered up to one billion dollars to fund tree-related projects across the US, and communities are eligible to receive up to fifty million dollars. Applications for this grant close June 1st. She emphasized that having an Urban Forestry Master Plan will put the City of Worcester in a good spot to receive some of this funding.
- iii. Member Conna pointed out that with fifty million dollars the city would have more than enough money to add 30,000 trees the estimated number of trees required to have 50% greening over the city as per the recently completed Heat Island Assessment report.
- iv. Deb Cary, a member of the public, recommended that the Urban Forestry Master Plan include more action steps, and asked that the Green Worcester Advisory Committee take a close look at the plan and give their recommendations.
- v. Member Conna asked DSR to help promote public comment on the Urban Forestry Master Plan through their newsletter and social media channels.
- iii. Update on Planning the 1st Annual Green Worcester Event
 - i. Mr. Odell stated that DSR hasn't made any firm decisions yet but are leaning toward their original idea, building connections between local non-profit groups and the city. He noted that there is also a possibility that DSR will host a second event that is geared toward residents. He will have more to report at the next meeting.

5. DSR Updates

- i. Green Worcester Dashboard & Annual Report
 - i. Mr. Odell introduced the city's new Green Worcester Dashboard which shows the city's sustainability measures and explains how residents can help the city achieve its sustainability goals. He explained that data and DSR's work will be added to the dashboard periodically, and that the city was excited to roll out the dashboard during Earth Week. The dashboard will inform the annual report, and DSR expects to have a draft of the annual report to the Committee by the June 26th meeting.
- ii. Community Meeting: Endicott & Bigelow Street Re-Design, 5:30pm May 11th (Attachment B)
 - i. Ms. Zhaurova explained to the committee that there will be a third community meeting for the Endicott & Bigelow Street Redesign Project. The pilot project redesigns the street to be safe for *all* users, not just cars and increases the area's resiliency by adding trees the trees will help reduce heat and prevent flooding. She also described that the city expects there to be a lot of support for this project, however, there has been some hesitation due to a slight reduction in parking spaces. She asked for GWAC's help garnering support for this project. Even though the project is in Green Island the city is hoping it will be a blueprint for future projects across the city.
- iii. Lakes & Ponds Program
 - *i.* Discount Rain Barrel Pre-ordering now open (Attachment C)
 - Mx. Mount relayed that the Lakes & Ponds Program having a pre-order for rain barrels.
 They are buying rain barrels in bulk and passing the discount onto residents. If you would like a rain barrel, you need to pre-order it by May 14th and they will be ready for pickup May 25th.
 - ii. 2022 WCMC Water Quality Reports

- 1. Mx. Mount relayed that the Worcester Cyanobacteria Monitoring Collaborative's Water Quality Reports are now posted on the Lakes & Ponds webpage.
- iii. Event: Catch & Cook at Bell Pond, May 1st
 - 1. Mx. Mount relayed that the Lakes & Ponds team is hosting an event at Bell Pond next week. The city posted about the event on their social media and the event was filled within two hours!

6. Standing Items

- i. Community outreach
 - i. Informational item. Green & Open Somerville: DePave the Way program
 - 1. Ms. Zhaurova explained that there is a volunteer group in Somerville that is de-paving private lots. She suggested that a group in Worcester could take this on as well.
 - 2. Chair Knittle would like to discuss this next meeting.
- ii. Community feedback
 - i. Member Conna commented on the quality of the new recycling bins. Many of the new bins on his street are broken. He measured the new bins and found they are 10% thinner than the old bins, which could factor into why they are breaking so easily. He added that the collectors slam them down with a lot of force and the plastic is brittle in the cold. He suggested the city includes in the next contract that the contractor is responsible for replacing the broken bins.
 - ii. Member Conna reiterated the issue of balancing tree cover and solar access. He presented his idea to the Urban Forestry Tree Commission, and they will discuss it. He would like trees to not be planted in front of solar collectors and for collectors not to be placed behind trees. He stated that he will continue to push this issue.
 - iii. Member Conna listed the current board and commission openings relevant to sustainability issues: Community Preservation Committee, Conservation Commission, Historical Commission, Parks Commission, and the Worcester Redevelopment Authority.
 - iv. Vice Chair Herwitz promoted John Odell's presentation on the Green Worcester Plan tomorrow (4/26) to the League of Women Voters at Broad Meadow Brook.

iii. Media

- i. Worcester Magazine Article, 3/24 (City teams up with community to take on pond scum, by Ted Conna *Attachment D*)
 - 1. Vice Chair Herwitz enjoyed the article and approved of the use of the word "yucky."
 - 2. Chair Knittle explained that the article was about the monitoring of cyanobacteria, mitigating it, and the importance of our community's work in this area.
 - 3. Mr. Odell stated that the WCMC is testing twenty-five lakes this year and has 60 volunteers, more than ever before. This will likely lead to more water testing and a better sense of how the lakes are faring. He commended the work of the Lakes & Ponds Program staff; Jacquelyn Burmeister, Nick Pagan, and Emily Maynard.
 - 4. Member Austin stated that she helps with the program and that the WCMC gathers people from communities outside of Worcester and, at this point, she believes that they are monitoring most waterbodies in Worcester.
- iv. Upcoming events (not DSR organized)
 - i. Earth Day at the Library
 - 1. Mx. Mount relayed that DSR went to a tabling event on Friday, April 21 at the Library for Earth Day. DSR explained their work to residents and told residents about other green measures they can undertake.
 - ii. Arbor Day event University Park (Attachment E)
 - 1. Saturday, April 29th an Arbor Day event will be held at University Park by Clark.

iii. Member Conna heard there is a Holy Cross student group that is looking to plant a few trees across the city. The group is looking for planting sites in the community. He stated that he has their contact information if anyone is interested. Member Leovich suggested a group that may be interested.

Ms. Zhaurova asked the group to stay for an additional minute to take a photo for the dashboard.

Adjournment

The committee voted unanimously to adjourn the meeting at 6:48pm.

Attachments

Attachment A: WCAC Presentation

Attachment B: Endicott & Bigelow Flyer

Attachment C: "Get Involved" Lakes & Ponds Flyer

Attachment D: "City teams up with community to take on pond scum" by Ted Conna

Attachment E: Arbor Day Event Flyer

2023 Upcoming Meetings

Green Worcester Advisory Committee meetings begin on Mondays at 5:30pm:

May 15 Esther Howland

June 26 Meeting Room A*

July 31 Levi Lincoln

September 18 Meeting Room A*
October 16 Esther Howland
November 27 Esther Howland

^{*}Meeting Room A is located at 50 Manny Familia Way.

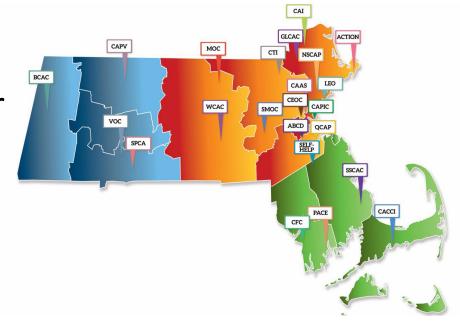


HEATING **ASSISTANCE** and ENERGY **EFFICIENCY** SERVICES

WCAC.NET
LIHEAP@WCAC.NET ENERGY@WCAC.net

Worcester Community Action Council

- Founded in 1965
- Private 501(c)3 not for profit organization
- Federally-designated antipoverty agency for Central MA and South-Central MA
- One of 23 Community Action Agencies in Massachusetts and 1,000 nationwide
- Funded through federal, state, and private grants



About WCAC

46 Communities Served

30,000+ People Impacted

125+ Employees in Action

USE OF FUNDS	with In-kind
Fuel Assistance	\$24,935,676
Weatherization/Energy Conservation	5,515,169
Head Start	3,566,134
Job & Education Center	2,986,351
Community Services Block Grant	1,041,811
Covid 19 Relief	868,309
Healthy Families	408,865
Resiliency Center	1,174,179
Fundraising	103,142
Other Admin	232,070
TOTAL USE OF FUNDS	\$40,831,706

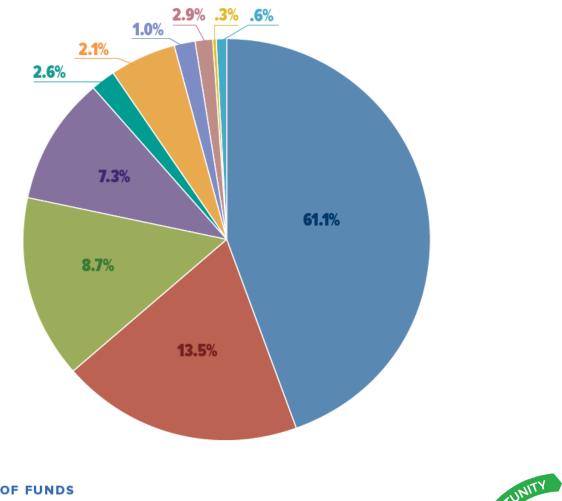


SERVING THE CITY OF WORCESTER AND 45 NEIGHBORING COMMUNITIES:

Auburn, Blackstone, Boylston, Brimfield, Brookfield, Charlton, Clinton, Douglas, Dudley, East Brookfield, Hardwick, Holden, Holland, Hopedale, Hubbardston, Grafton, Leicester,

Mendon, Milford, Millbury, Millville, Monson, New Braintree, North Brookfield, Northborough, Northbridge, Palmer, Oakham, Oxford, Paxton, Rutland, Shrewsbury, Southbridge, Spencer, Sterling, Sturbridge, Sutton, Upton, Uxbridge, Wales, Warren, Webster, West Boylston, West Brookfield, and Westborough.

https://wcac.net/annual-report/







Other Admin **ACTION** COUNCIL

Home Energy Assistance Program

LIHEAP (FUEL ASSISTANCE)

Eligibility is based on the number of individuals, adults and children, who live in a household, and their combined income.



FY23 LIHEAP Income Eligibility

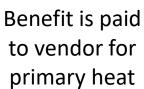
Number in Household	Annual Income	Income Past 4 Weeks
1	\$42,411	\$3,262
2	\$55,461	\$4,266
3	\$68,511	\$5,270
4	\$81,561	\$6,273
5	\$94,610	\$7,277

Home Energy Assistance Program

LIHEAP (FUEL ASSISTANCE)









Energy Efficiency Benefits



Gas, oil, electricity, propane, wood and heat included in unsubsidized rent



Water and Sewer Bill Assistance



Can be owner or renter



Protection from Service **Termination**



Single family home, apartment or condo



Payment and Forgiveness Plans

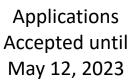


30th



Usage between Nov 1 and April







Discount Rate on utilities all year



Emergency Assistance Funds

Convenient LIHEAP Application Options

- Online: Available in dozens of languages (both first time and returning participants)
 - https://wcac.net/fuel-assistance/
- Telephone: Call or email to schedule a telephone intake: 508.754.1176
 - Weekend and evening appointments available
- Walk in: 18 Chestnut St, Worcester 9:00 4:00 daily
- By appointment at many partner sites
 - Schedule online or via phone
 - Southbridge, Webster, Spencer, West Warren and others.
- Email questions to: <u>LIHEAP@wcac.net</u>
- Application Status line: 508.796.2423 24/7

First time applications require a phone or in person interview prior to certification.



Weatherization and Energy Efficiency

Through the lens of Social Justice, Environmental and Energy Equity, we are reducing the Energy Burden for low (and moderate income) households, advancing community-wide energy efficiency, meeting electrification goals and ensuring that the same opportunities exist in the marketplace for all people, that they are able to access and benefit from the latest technologies and thrive in safe and healthy residences.

Weatherization and Energy Efficiency

Same Application!

Eligible households may also qualify for NO CO\$T:

Weatherization

Heating system upgrades

Heating system repairs

Electrical Audit with No Cost Appliance Replacement

WCAC directly serves 1-4 unit properties, Owners or Renters 5+ unit projects are served through LEAN.

Refrigerator/Freezer
Air conditioner
Dehumidifier
Washing Machine
LED Lightbulbs

Appliance Management Program

- In-Person client education
- Instant savings measures
 - LED lightbulbs
 - Power Strips
 - TLC Kits
 - Water saving measures
- Appliance upgrades

Available Appliances

- Refrigerators
- Freezers
- Window Air Conditioners
- Dehumidifiers
- Washing Machines



Weatherization



For more information, visit: energy.gov/eere/wap

D0E/EE-2124 · June 2022

- Create a more energy efficient dwelling
 - Insulation, Air Sealing, Barrier Mitigation and Repairs
- Positive impact on local employment and energy costs
 - Local Professional Contractors
- Generates energy and non-energy benefits for the community.

"Weatherization not only helps households, it also helps revitalize communities by spurring economic growth and reducing environmental impact.

Weatherization returns \$2.78 in non-energy benefits for every \$1.00 invested in the Program (National Evaluation)."

https://nascsp.org/wp-content/uploads/2020/01/WAP-Fact-Sheet-2019.pdf

Weatherization and Energy Efficiency

Typical Weatherization Measures



- Clean, tune, repair, or replace heating and/or cooling systems
- Install duct and heating pipe insulation
- · Repair leaks in heating/cooling ducts
- Install programmable thermostats
- Repair/replace water heaters
- Install water heater tank insulation
- · Insulate water heating pipes
- Install solar hot water heating systems.



BUILDING SHELL MEASURES

- Install Insulation where needed
- Perform air sealing
- Repair/replace windows and doors
- Install window film, awnings, and solar screens
- Repair minor roof and wall leaks prior to attic or wall insulation.



ELECTRIC and WATER MEASURES

- Install efficient light sources
- Install low-flow showerheads
- Replace Inefficient refrigerators with energy-efficient models.



HEALTH and SAFETY MEASURES

- · Perform heating system safety testing
- Perform combustion appliance safety testing
- Repair/replace vent systems to ensure combustion gas drafts safely outside
- Install mechanical ventilation to ensure adequate indoor air quality
- Install smoke and carbon monoxide alarms when needed
- Evaluate mold/moisture hazards
- Perform Incidental safety repairs when needed.

Funders:

US Department of Energy – DOE WAP

US Health and Human Services -- HEARTWAP

National Grid

Eversource

WCAC area Investment in FY 22: \$5.5 million

Additional funding
through DOE BIL and
SERC Grants via DHCD



Heating Systems

HEARTWAP Emergency Replacement

- Traditionally, provided similar replacement system to the one that is in place.
- New protocol is to assess for ASHP opportunity first.
- Available to income eligible homeowners or tenant when the landlord is also eligible.*

HEARTWAP Emergency Repair

- Homeowners
- Oil Tank Replacement
- Asbestos Abatement
- Clean and Tunes

*Other eligibility criteria may apply.



The BIG Story: Air Source Heat Pumps

- Efficient electric heat and cooling
- Full displacement
- Customized design
- Fully managed projects
- Cold Climate equipment serves beyond -10 degrees
- Experienced leaders in electrification of home energy





WCAC Energy Efficiency Team



Energy
Outreach &
Customer
Care
Coordinator

Sr. Heating Systems Specialist Heating System Specialist(s)

BPI QCI Inspector (3) Energy Auditor Specialists

Assistant Energy Director

Weatherization Manager Sr. AMPS Auditor

AMPS Auditor Energy Admin. Assistant Energy Billing Specialist Energy Financial Analyst

Director of Energy Resources

Growing Employment Opportunities



Retrofit Installer Technician

Installs home energy-saving upgrades



Crew Leader

Supervises installation of home energy-saving upgrades



Energy Auditor

Examines homes to identify energysaving upgrades



Quality Control Inspector

Ensures quality and completion of installed energy-saving upgrades



Client Intake Specialist

Confirms client eligibility for the program



WAP Program Manager

Oversees program staff, planning, and performance.



Growing Training Opportunities









TEST CENTER





Contractors

- Weatherization Contractors: 28 Local companies, weatherization, electrical and barrier mitigation firms.
- **Heating Contractors:** 33 local companies including HVAC Specialists, oil vendors, plumbers, electrical and asbestos abatement companies.
- LIHEAP Fuel Contracts: 58 utilities and delivered fuel vendors
- Local investment in the communities we serve!



Partnerships



The Low-Income Energy Affordability Network is the statewide network of local Community Action Agencies who provide energy efficiency and other energy services at no cost to income eligible clients. LEAN brings together over 40 years of experience and funding from all different sources to identify, scope, project manage, inspect and pay for energy efficiency installations in residential housing.



Mission: To strengthen, unify, and advocate with the Community Action Statewide Network to advance economic, racial, and social justice and to create communities where everyone thrives.



The Massachusetts Department of Housing and Community Development oversees funding and resources to help people in Massachusetts live affordably and safely.



Partnerships

- MEDA Massachusetts Energy Directors' Association
- AMP Best Practices: With representation from Utilities, Attorney General's office
- LEAN Best Practices: Includes Utilities and Efficiency Advocates
- DHCD Advisory Committees: Standing and ad-hoc



Is this Mass Save?

Anchored by federal funding from the Department of Energy and Health and Human Services, this network ensures delivery of Utility-Funded Energy Efficiency opportunities with a focus on Social, Environmental and Energy Justice to income-eligible households, in partnership with the market rate program, Mass Save.

The Community Action Network provides fully managed, professional installation of appropriate measures through a trusted and reliable delivery system at no cost to clients.

















Thank you!



Mary Knittle
Director of Energy Resources
18 Chestnut Street, Suite 500
Worcester, MA 01608
508.762.9815

mknittle@wcac.net

COMMUNITY MEETING INVITATION

Re-Designing Endicott & Bigelow Streets



Your Streets Designed for All Users



- Multi-functional
- Safe
- Accessible
- Connected
- Comfortable

Tell us what you think for a chance to win a \$50 gift card by coming to the Community Meeting or filling out a 3-minute

survey!



50 Canton St, Worcester Thursday, May 11, 5:30 pm Refreshments will be served.



worcesterma.gov/mobility

Get Involved at Your Lakes!

Connect and Learn

Subscribe to our Newsletter



Keep up to date with Lakes & Ponds Program events and opportunities by signing up for our monthly newsletter, "The Blue Space Splash"!



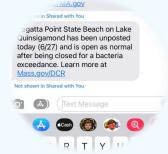
Become a
WCMC
Volunteer



Learn more about the WCMC at worcesterma.gov/wcmc. Scan the QR code link to sign up for the Virtual Volunteer Information and Training session on 12-Apr.



Sign Up for Text Message Alerts



Sign up to receive Text Message Lake Alerts to get information about lake advisories and closures so you know what to expect before heading to the lake.



Report a Scum on Lake Quinsigamond



We need your help to track local algal blooms on Lake Quinsigamond! If you see scum, report when and where on our web form.



Order a Rain Barrel



Rain Barrels save water and reduce nutrient loading in our lakes and ponds. Pre-order a discounted rain barrel for pickup at our bulkdistribution event in June.



Get Involved at Your Lakes!

Connect and Learn

Join Your Local Watershed Association





Watershed associations meet to discuss and act on issues occurring in and around waterbodies. Organizations in Worcester include the Tatnuck Brook Watershed Association (tatnuckbrook.org), the Lake Quinsigamond Watershed Association (lqwa.org), and the Indian Lake Watershed Association (ilwa.org).

Join a City Board or Commission



Join a board or commission to be a part of decision making on issues you care about in the City. There are currently vacancies on several City of Worcester boards and commissions, including the Conservation Commission and the Parks and Recreation Committee.

BOARDS & COMMISSIONS

One of the duties of the City Manager as Chief Executive Officer of the City of Weecester is to appoint mem of municipal basets, commissions, and advisory committees. In some cases the nominated appointness have their nominations approved by vote of the Worcester City Council.

All residents committed to preserving the vitality of our democratic institutions are urged to volunteer the services to one of these local government agencies whose effective operations depend so heavily upon

PUBLIC NOTICE-VIRTUAL MEETING

Pursuant to Chapter 20 of the Acts of 2021 and in order to ensure active, public engagement, the City of Worcester currently allows for both in-person and remote participation at all City Council and Standling Committee meetings. To partake in the "Public Participation" section of this meeting, you may attent the meeting in-person within the meeting incluston, or to join via the Virtual Application follow the link or disk the

Bonning a City Council Zoom Ever
 Government Channel Live Stream

Talk to Your Elected Officials



Another way to have your voice heard is to contact your elected officials. Scan the QR code to learn more about how to get in touch with your district and at-large councilors.



Vote in Your Local Elections



Voting in local elections is one of the best ways to make a difference in your community. Scan the QR code to learn about ballot questions, candidates, and how to make your voting plan.







COLUMNS | **Opinion** *This piece expresses the views of its author(s), separate from those of this publication.*

City of Worcester teams up with community to take on pond scum

Ted D. Conna Special to Worcester Magazine

Published 5:01 a.m. ET March 22, 2023

Worcester's lakes and ponds have an age-old problem, which seems to be getting worse. And thankfully, the solution may lie in a growing partnership between effective government and a concerned community of volunteers.

First, the problem: Cyanobacteria, or blue-green algae, are naturally occurring, single-celled, photosynthetic organisms that play an important role in aquatic ecosystems, but sometimes multiply out of control, which is called a bloom.

Blooms can be invisible, or obvious, with discolored, scummy water — but not all pond scum is a bloom. They can happen year-round, but usually occur in the summer and fall.

Pollution, goose poop among culprits

Many factors contribute to cyanobacteria blooms, including weather conditions (warm temperatures and rainfall), poor water circulation, and pollution and nutrients from human and natural sources (runoff containing fertilizer, human waste from septic systems, goose poop, etc.) By all accounts, the problem is worst in urban water bodies where there is more nutrient pollution.

Why are blooms a problem? Whether or not they make the water discolored, scummy, or stinky (the technical term is "yucky"), blooms deplete oxygen from the water, which can cause fish kills and may also produce dangerous toxins that can sicken people, pets and wildlife.

This is why lakes and ponds get closed to public swimming when there is bloom. Dogs are at particular risk, because they're happy to get into yucky water and then lick themselves clean.

Worcester has dozens of water bodies, almost all of them human-made, which means they are shallow and warm up quickly. Some circulate poorly or not at all. Most get plenty of pollution from urban runoff.

So, cyanobacteria blooms are fairly common, but not entirely predictable. People depend on these waters to swim, boat and fish. So the challenge for city government is to monitor these many "blue spaces" frequently, with limited resources, so the public can be alerted when blooms occur.

A team approach

One solution could be the Worcester Cyanobacteria Monitoring Collaborative, a happy marriage of concerned and committed community volunteers with a nimble, technically savvy city agency (the Lakes and Ponds Program, part of the Department of Sustainability and Resilience), supported by experts at Environmental Protection Agency and the University of New Hampshire.

The collaborative began in 2017 and has grown more effective each year. In 2022, more than 50 volunteers collected and analyzed water samples from 24 water bodies in and around the city twice monthly from May through October, with results uploaded to the collaborative's page on the city's website.

The testing produced a clear picture of when and where cyanobacteria blooms occurred. Special attention is paid to Coes Reservoir, Indian Lake, Bell Pond and Lake Quinsigamond, which all have public beaches, so the city can protect the public with targeted closures when necessary. There are even signs posted at the beaches with QR codes linked to current water quality information on the city's website.

Several of the volunteer teams involved partnerships with educators and students at the EcoTarium, Bancroft School, WPI and QCC. And at WPI, there is a project underway to turn the water testing program into a STEM learning module, so that it could be integrated into the public school curriculum citywide. What better way to teach appreciation and stewardship of our blue spaces than to involve young people in the hands-on work of understanding and protecting them!

The WCMC continues to innovate. At Burncoat Pond, one of the ponds hardest hit by blooms, the city will experiment next year with treatments using barley straw, which releases hydrogen peroxide that is toxic to cyanobacteria as it decomposes. If it works, we'll have a low-risk, natural solution to a very common — and sometimes high-risk — natural problem.

Many ways to help

The ongoing goal of the program is to keep refining the test methods and treatments to better predict and prevent cyanotoxin exposure risk. Worcester is on the cutting edge of this work, using EPA/UNH protocols to develop test methods that deliver accurate results at a fraction of the cost of current state-certified methods, which the city also uses. Our success here may help make water-quality monitoring more affordable and accessible to communities everywhere.

And of course, none of this would be possible without all the well-informed and engaged volunteers. The WCMC, with a city staff of just two people, Jacquelyn Burmeister and Nick Pagan, is a prime example of how sustainability goals can be achieved even with limited resources. It's no surprise that this partnership continues to grow, because it's working. Real progress is possible when government partners with the community, and everyone learns in the process.

Want to help understand and protect your favorite lake or pond? The 2023 monitoring program will resume with a virtual training at 6:30 p.m. April 12, with the first samplings taken in early May. Anyone can register for free at tinyurl.com/WCMC23 or https://www.eventbrite.com/e/523602377807. To learn more or to volunteer, visit http://worcesterma.gov/WCMC or email greenworcester@worcesterma.gov.

Ted D. Conna is a longtime environmental activist. He was the first executive director of the Regional Environmental Council, and now represents District 4 on the Green Worcester Advisory Committee, promoting the full implementation of the award-winning Green Worcester Plan.

ARBOR DAY FESTIVAL 2023

SATURDAY, APRIL 29TH, 11AM-3PM



FREE
Family
Event!

LOCATION: University Park, Worcester

FREE ICE CREAM FOR FIRST 150 KIDS
KIDS TREE CLIMBING - BUBBLE MANIA
LOCAL MARKETPLACE & FOOD TRUCKS
SCIENCE & ART ACTIVITIES - COMMUNITY
BOOTHS - MUSIC - AND MUCH MORE!