



### Committee Members

Mary Knittle, Chair  
Ted Conna  
Stefanie Covino  
Nathan Fournier  
Evelyn Herwitz  
Deirdra Murphy  
7<sup>th</sup> member TBD

### Contacting the Committee

Department of Sustainability and Resilience  
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### 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  
Jacquelyn Burmeister, Senior Environmental Analyst, Lakes and Ponds Program  
Jessica Davis, Project Manager  
Nick Pagan, Environmental Analyst, Lakes and Ponds Program  
Sushil Rajagopalan, Energy 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, 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.

# CITY OF WORCESTER

## Green Worcester Advisory Committee

Meeting Minutes  
Monday, March 7, 2022 at 5:30 p.m.  
Location: Virtual, Webex

This Green Worcester Advisory Committee meeting will be held remotely at the date and time listed above.

**Web:** Use the following link to join the meeting via computer  
<https://cow.webex.com/meet/greenworcesteradvisorycommissionwebex>, or

**Call:** 415-655-0001. **Access Code:** 2313 821 4580.

#### Present:

District 1: Mary Knittle, Chair  
District 1: Evelyn Herwitz  
District 2: Nathan Fournier  
District 4: Ted Conna  
District 4: Deirdra Murphy  
District 5: Stefanie Covino

#### Absent:

None

#### Staff:

John Odell  
Jacquelyn Burmeister  
Jessica Davis  
Nick Pagan  
Sushil Rajagopalan  
Luba Zhaurova

### Call To Order: 5:33 pm by Mary Knittle, Committee Chair

#### Welcome

a. This is the first meeting of the Green Worcester Advisory Committee (GWAC). All committee members and Department of Sustainability and Resilience (DSR) staff introduced themselves.

#### 2. GWAC Proposed Charge – Discussion

a. DSR staff shared the proposed charge of the GWAC (see Attachment A). This proposed charge is based on the City of Worcester (the City) ordinances and the priorities listed in the Green Worcester Plan (GWP).

b. GWAC discussion: this will be a living charge and we can work more on it in the future but for now, there are no objections.

Motion: Motion by Member Herwitz to accept GWAC roles and responsibilities as stated in the proposed charge with the understanding that it may be updated at any time.

Second: Member Conna

Roll call:

Member Knittle - Aye  
Member Conna - Aye  
Member Covino - Aye  
Member Fournier - Aye  
Member Herwitz - Aye  
Member Murphy - Aye

The motions passed.

### 3. An overview of DSR goals & current/upcoming projects

a. DSR staff shared the following goals and priorities.

#### b. Goal 1: Reduce Carbon Emissions

i. *Measuring, Planning, Commitments:*

1. Greenhouse Gas Emissions Inventory (Kim Lundgren Associates, Inc.)
  - a. DSR is in the process of updating the City's GHG inventory. This will include both the community and municipal sector and the data will encompass 2009-2019 (year chosen because it represents an average year before pandemic). It is anticipated to be completed by the end of spring 2022.
  - b. DSR will plans to update the data annually or bi-annually going forward.
2. Green Community Designation and Reporting (since 2010)
  - a. The City was designated as Green Community by the state in 2010 which requires meeting 5 criteria to maintain that designation. DSR noted two main requirements are reporting on municipal energy reductions (20% from the 2009 baseline) and adopting the building stretch code.
3. Better Buildings Challenge (since 2013)
  - a. To participate in the Better Buildings Challenge, the CITY committed to reducing its building portfolio emissions by 20% by 2020. We weren't able to achieve that yet and are still working towards that goal. We added some new facilities to the City which has slowed progress on that goal.
4. Better Climate Challenge 2022 signatory – commitment to reduce GHG emissions reductions by 50% in 10 years without the use of offsets in municipal facilities
  - a. The City signed onto this challenge recently and the goal is to move away from fossil fuel to non-fossil fuel sources of energy. This means moving toward building electrification and a greener electricity portfolio.
5. Draft MOU with utilities for 3 years to meet energy efficiency goals for municipal facilities and the community
  - a. Partner with National Grid and Eversource to maximize incentives, particularly for underserved populations.

ii. *Managing:*

1. Upcoming Solar Installations (21 total existing and upcoming), O&M
  - a. The City has 16 active systems and 5 more upcoming this year.
  - b. The main vehicle for installing solar was through the City's ESCO.

2. Upcoming Electric Vehicle Charging Stations, O&M; META Grant
    - a. The City is pursuing and utilizing incentives to help pay for electric vehicles and electric vehicle charging stations for both municipal and public spaces. This is an ongoing project.
  3. Frances Perkins Library – Investigating opportunities for electrification
    - a. Frances Perkins Library is a 100 year old building and we are hoping to get it net-zero which would be an excellent example of the possibility of net-zero for existing building renovation projects.
  4. Municipal Aggregation Program
    - a. This is our primary tool for reducing emissions in our electricity portfolio for the community as a whole because a bulk of the City residents are participating in this program (20% more than the 20% mandated by the state already, for a total of 40%). One goal is to increase outreach and marketing for this program. We are looking forward to pursuing even more green electricity in the near future. This program has a huge impact.
- iii. GWAC Discussion:
1. Member Conna asked if these programs are for municipal or public sector. Mr. Odell clarified that it is a mix, depending on the program. GHG emissions inventory is for both sectors, Green Community is solely municipal, Better Buildings is solely municipal and aggregation is for the community.
  2. Member Herwitz asked if the solar installations on schools provide power to the schools and what happens to the electricity generated at the landfill. Mr. Odell explained that the electricity on buildings is back-fed into the facility first but when the output exceeds the demand, it flows back out to the grid. However, that is an exception and not common at the schools. For the landfill, all the electricity goes out to the grid as there isn't a facility to power on site. The electricity is net metered virtually, is assigned a value and then transferred to the schools. The City decided to be the developer ourselves for the landfill solar, rather than leasing land to a developer. That is why the landfill is one of the most cost effective measures we have taken.
  3. Member Herwitz asked how much money is saved from the schools from solar. It would be good for marketing to know that information. Mr. Odell explained that there is a lot of information about the solar program and others on the WorcesterEnergy.org website. He also agreed that sharing that sort of information is a good idea.
  4. Member Conna said that when the GWP was being prepared it was decided that within 25 years, the City buildings would be free of fossil fuels. He asked what the plan is for that and what baseline data the city is using. He brought up carbon impact modeling and asked if City can request that developers do that and asked if the Planning Board is looking at carbon impacts. He asked if the City could partner with WPI or Clark University on carbon impact modeling. Mr. Odell replied that there is an active effort on the state level for a new net-zero stretch code, City commented on it and said we are not in support of the current proposed code because we want to strengthen it. We need to create conditions so that when people upgrade, they can reach net-zero. There are some important considerations including that National Grid may need to update the grid's capacity so it can handle the load of electrification of buildings so their grid can handle it. Also, we want to be careful and aware of the possible increased costs of electrification for those with limited income. We are actively working on this issue with utilities and local representatives. Another project is the Sustainability Scorecard which may include carbon modeling at some point.

**c. Goal 2: Advance Climate Change Resilience**

- i. Neighborhood-Based Urban Heat Risk Assessment for Worcester, Massachusetts (by Dr. Brian Stone and Evan Mallen)
  1. This project's deliverable will be a high resolution map that shows the most vulnerable communities in the City for the Urban Heat Island Effect and proposed solutions. City DPW is working on the Urban Forestry Plan which is tied closely to this project. DSR will try to show results from this assessment to GWAC in the next couple of meetings.
- ii. Clark University's Project – Urban Flooding in the Green Island Neighborhood.
  1. Clark University students researched municipally owned properties that are vulnerable to urban flooding. They created the below Storymap which is really good to look at for what can be done in neighborhood level.

Storymap URL:

<https://storymaps.arcgis.com/stories/1a804d8cfca8426996ab98b372b0d288>

- iii. Municipal Vulnerability Preparedness Grant – upcoming action grant
  1. DSR developed a MVP plan in 2019 which made us eligible for MVP action grants. The plan determined three main climate change-related vulnerabilities for the City: 1. Heat 2. Winter storm/ice storms 3. Flooding.
  2. DSR received a MVP action grant in the past that paid for the rain gardens at City Senior Center.
  3. We are exploring opportunities for projects to apply for MVP grants this year which is coming up. Main ideas include mapping storm water infrastructure, researching and implementing Green Infrastructure projects. We are hopeful we can get the grant because the projects are very expensive.

**d. Goal 3: Advance Mobility Transformation**

- i. This is a very important part of our work because transportation makes up a significant portion of our total emissions. DSR is working in tandem with Planning Division and DPW on this plan. The Urban Mobility Master Plan will be a subset of the long range transportation plan and will focus on sidewalks, bike lanes, EVCS, trees, green infrastructure, bus routes and mass transit.
- ii. Upcoming in July – Launch of the Mobility Master Plan (aligning with the Master Plan <https://now-next.worcesterma.gov> and Urban Forest Master Plan)
- iii. Future Department of Urban Mobility & Transportation
  1. This new department will address transportation more holistically. It will hopefully start in this July and will start hiring staff throughout the year as budgets allow.
  2. DSR will have a strong support role and be an active player in all of this work.

**e. Goal 4: Support and Grow Lakes and Ponds Program**

- i. **Current Year** <http://www.worcesterma.gov/sustainability-resilience/recreational-waters>
  1. Mission is to preserve and protect City lakes and ponds
    - a. Lakes and Ponds Program (LPP) started in 2016 and works to protect the blue spaces. LLP created a water quality monitoring program to allow the water resources to be healthy recreational assets to the communities.
  2. Monitoring (Worcester Cyanobacteria Monitoring Collaborative)
    - a. Hiring a new staff, Nick Pagan, this year was helpful in increasing monitoring.
    - b. There are informal groups that volunteer to monitor cyanobacteria which is a large issue and causes algal blooms. These volunteers take water quality samples once per month.
  3. Management (Alum Dosing Station Project)

- a. Alum is a chemical that is used in drinking water filtration that pulls sediment out of water. It is currently use at Indian Lake to reduce cyanobacteria but this is expensive and only temporary. Every time there is a big rain storm, they have to apply alum again. Therefore, they are going to build an alum dosing station that will be more effective. It will use a rain gage for when storm events are occurring and dose with alum as it enters. It has been in the works for a while and we are hoping to go out to bid soon.
  - 4. Education and Outreach (Angler Series; The State of the Lakes Report & Presentation)
    - a. LLP increase their programing this year by working with community groups more. A successful one was working with the anglers which were very popular events.
    - b. LLP recently did their Annual State of the Lakes presentation which was open to the public. They presented data and accomplishments and how people can get involved to improve those spaces.
  - 5. ARPA Funding
    - a. They put together a vision for LPP and how to address the threats to the blue spaces and how to increase access to these spaces.
- ii. **Upcoming Years' Priorities:**
  - 1. A: Technological Updates to the Current Monitoring Program
  - 2. B: Invasive Aquatic Plant Prevention
  - 3. C: Improve Cyanobacteria Monitoring and Response
  - 4. D: Increase Education, Outreach, and Community Engagement
  - 5. E: Expand Lake Management Plan Development and Execution
  - 6. F: Increase Overall Program Capacity
  - 7. Hoping to hire new staff to help with these priorities and want to use more technology in their work including solar powered monitoring. We want to make sure that people don't have to worry about their dogs playing in the water and we wants to increase engagement.
- iii. GWAC discussion:
  - 1. Member Covino asked if there is a potential to partner with the Blackstone Collaborative work as it is closely related to the LPP. Ms. Burmeister replied that it would definitely be a great collaboration, especially since there is so much sample data.
- f. **Goal 5: Educate, Effectively Communicate and Facilitate Action at the Community Level**
  - i. Work with the GWAC on the Strategic Communication Plan and Implementation
    - 1. DSR want to work with GWAC to share the work that is being done and where to improve the communication.
  - ii. Comprehensive Annual Report to the GWAC
    - 1. DSR will deliver this report to the community and GWAC.
  - iii. Dashboard - <https://opendata.worcesterma.gov>
    - 1. DSR will provide data related to GWP for the City to include on the open data dashboard.
  - iv. Green Worcester e-list
    - 1. DSR has an e-list and a goal is to grow the list over time.
  - v. Communication with organizations in the recent past
    - 1. DSR has done a lot of outreach to schools and other organizations such as churches and non-profits and we want to work to get everyone involved in the GWP initiatives.
  - vi. GWAC discussion:
    - 1. Member Conna stated that to get citizens behind this ambitious agenda, we have to educate young people to care about these issues and asked how we can work with the

schools to do this. Mr. Odell said that curriculum is based on testing and state standards so it is difficult to make changes. However, there have been some recent changes so that Climate Change is included in curriculum on the state-level. Changing curriculum is difficult but maybe there could be collaboration and ideas in the future.

**g. Goal 6: Maintain Structural Support for ongoing GWP Implementation**

- i. DSR hired a Project Manager and Energy Analyst in January 2022 and is looking to hire a Manager of Energy Services by the end of the FY, for a total staff of 7. This position would work on renewable energy and efficiency work in municipal buildings.
- ii. DSR also wants to hire another staff member for the LPP.
- iii. Develop a Sustainable Project Score Card for potential and existing municipal projects for GWAC review.
- iv. GWAC discussion:
  1. Member Covino asked about DSR collaboration with Inspectional Services and they have data on flood plains. Mr. Odell said that was not on the top of the list as of now due to the many current priorities but would be great to work with them on when we can.

Motion: Motion by Member Herwitz to accept the DSR report as presented.

Second: Member Murphy

Roll call:

Member Knittle - Aye  
Member Conna - Aye  
Member Covino - Aye  
Member Fournier - Aye  
Member Herwitz - Aye  
Member Murphy - Aye

The motions passed.

**4. Strategic Communication Plan**

- a. Overview of existing City resources
  - i. Currently the City has a communications team of 2 staff in the City Manager’s office. They manage social media, press releases and other communications. They partner with Cultural Services to market events. DSR’s current process for communication is to give the City Manager’s communication team the information we want them to share and they post it on social media for us.
- b. GWP – “Getting Started” sections at the end of each chapter
  - i. These sections are helpful and people should check them out.
- c. GWAC discussion
  - i. Member Herwitz a suggested framework for the strategic communication plan 1) what are your goals and objectives for the GWP? 2) who are the target audiences? A paradigm shift to “what is the problem the audience you are targeting is trying to solve and how is the work you’re doing help them?” Stories need to be created to make it understandable to average residents 3) Need to work on buy-in from other departments in the city and build a sense of civic pride to explain that this will be good for the present and future.
  - ii. Member Conna said that the GWAC needs to help, be diplomats for this plan and agreed with all of Evelyn’s ideas. He also emphasized the need to get local organizations on board.

- iii. Mr. Odell said that DSR can think about stories we want to tell and DSR could create a list to show to GWAC to get feedback on that. The GWP consultant wrote success stories for us for marketing so we could share them too.
- iv. Member Covino suggested that we collaborate with the City Comprehensive Plan process to add our GWP lenses.
- v. Member Fournier emphasized the success of the MassSave program and that we should promote that. He also suggested we incentivized things like rain gardens.

**5. Other business**

- a. Received Communications
  - i. None
- b. Vice Chair Election

Motion: Motion by Member Herwitz to table the Vice Chair election until next meeting so committee members can think more about this.

Second: Member Covino

Roll call:

Member Knittle - Aye  
Member Conna - Aye  
Member Covino - Aye  
Member Fournier - Aye  
Member Herwitz - Aye  
Member Murphy - Aye

The motions passed.

- c. Upcoming Meeting Schedule
  - i. GWAC discussion:
    - 1. Meetings will be in person at city hall – what time do people want to do?
    - 2. After brief discussion, committee agreed to do second Mondays instead so next meeting is April 11 at 5:30pm in person at City Hall.

Motion: Motion to adjourn the meeting by Member Covino

Second: Member Herwitz

Consent

The motion passed.

**Adjournment 7:38**

**Attachments**

Attachment A: GWAC Charge  
Attachment B: Meeting Presentation