

Committee Members

Mary Knittle, Chair

Stefanie Covino, Vice Chair

Ted Conna

Nathan Fournier

Evelyn Herwitz

Deirdra Murphy

7th member TBD

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 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, 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 Green Worcester Advisory Committee

Meeting Minutes

Monday, May 9, 2022 at 5:30 p.m.

Location: Levi Lincoln Chamber, City Hall Floor 3

This meeting will be held in-person at the date, time and location listed above. Meeting attendees will additionally have options to participate remotely by joining online or by phone. Note: If technological problems interrupt the virtual meeting, the meeting will continue

Web: Use the following link to join the meeting via computer

 $\underline{https:/\!/cow.webex.com/meet/greenworcester}, or$

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, Vice Chair

Absent:

None

Staff:

John Odell

Jessica Davis

Sushil Rajagopalan

Luba Zhaurova

Call To Order at 5:32 pm by Mary Knittle, Committee Chair

1. Welcome. The Chair read out the rules of meeting conduct.

2. Approval of Minutes – April 11, 2022

The Committee voted unanimously to approve the April 11th minutes with a correction to a typo of "Mr. Zhaurova to Ms. Zhaurova" as requested by Member Conna.

3. New Business

- a. GHG Inventory Presentation on May 26 and brainstorming opportunities for engaging community
 - i. Mr. Odell explained that DSR is planning this event to be held on May 26 at 5:30pm in the Levi Lincoln room on the third floor of City Hall. The purpose of the event is to share the results and lessons learned from the greenhouse gas emissions inventory including opportunities and concerns moving forward. DSR wants a wider audience to receive this information so the event will be open to the public and will be held in person but in a hybrid format to accommodate those who wish to watch remotely. Mr. Odell requested that the GWAC members help DSR publicize the event to engage as many community members as possible.
 - ii. Member Herwitz requested that DSR staff provide a short blurb describing the event for committee members to circulate to their connections and suggested that the event be advertised on the City's social media.
 - iii. Member Conna suggested that a news release and announcement go out about the event.
 - iv. Chair Knittle asked that attendees register in advance for the event so that DSR can plan the event accordingly.
 - v. Mr. Odell thanked the members and stated that his staff will implement recommended actions.
 - vi. Member Conna asked if he could add his networks to the current DSR e-list and Mr. Odell confirmed that he could and that DSR would appreciate any members sharing contacts to build the e-list.
- b. Discussion about new City Manager hiring process and incorporation of GWP commitment as a selection criteria
 - i. A resident present in person asked what the purpose of the Green Worcester Advisory Committee is and the criteria for participating in it. Mr. Odell explained that the City created the Green Worcester Plan (GWP), approved by the City Council in April 2021, which includes steps to minimize our carbon emissions, improve waste management, and keep our air and water clean, among many other environmental and sustainability goals. The GWAC is tasked with helping the City achieve the goals set forth in the GWP. The also GWAC represents the community and provides feedback to the City to make sure DSR's work is fair and transparent.
 - ii. Chair Knittle asked what the interview process is for the new City Manager and what the GWAC can do to make sure that the new City Manager prioritizes the work that is most important to the GWAC.

Mr. Odell explained that the current City Manager is leaving at the end of May and the City Council already selected an acting City Manager, Eric Batista who is currently the Assistant City Manager, who will serve for 9 months or until a new City Manager is hired. The City Council is charged with selecting a new City Manager. It is within the purview of the committee to write a letter with recommendations to the City Mayor for what type of candidate qualifications they are looking for in a City Manager.

Member Conna stated that he would like to work on a draft letter, and Ms. Covino volunteered to assist. Mr. Odell stated that two members could use GoogleDocs to develop a draft, but that they should be vigilant in not sharing the draft's link with anyone else to ensure compliance with the Open Meeting Law related to meeting of a committee's quorum outside posted meetings. Mr. Odell suggested that GWAC members who are interested could also send their ideas to DSR who will collate them and send them to Member Conna and Member Covino to create a draft. Chair Knittle confirmed this plan.

c. Discussion of strategy to achieve GWP goal of 100% zero-carbon buildings citywide by 2045

- i. Mr. Odell shared the **DSR's Departmental Developmental Plan** (**Attachment A**) which contains the department's goals for the upcoming year and is incorporated in the annual budget. The draft is not final and not public yet but will be once finalized. This budget and goal setting is an iterative process and will evolve over time.
 - Chair Knittle said that she will send an email asking the GWAC members for their priorities based on the DDP goal lists and "Getting Started" charts (**Attachment B**) provided by DSR and she will collate that information to prioritize for future conversations.
- ii. Member Conna provided written comments on this topic, see Attachment C, titled "Discussion of strategy to achieve GWP goal of 100% zero-carbon buildings citywide by 2045" for the full comments.
- iii. Chair Knittle noted that Member Conna is approaching this topic from resident angle and Mr. Odell's presentation was from the city angle.
- iv. Member Herwitz asked what actions the local government can take to accomplish this goal such as policies and regulations or incentives. Mr. Odell explained that this is a really difficult transition. For the residential angle, we see this as an incentive effort for now until that changes which would most likely be on a statewide level. The City won't be saying what you can and can't do to heat your home and instead, we want to incentive people to do the right thing. There are some programs (such as MassSave) that are currently in place that incentivize switching from gas or oil to electric heat pumps. We want to educate the public on MassSave and other incentives such as federal credits for solar on your home. We also want to maximize the City's electricity aggregation program to get more residents to sign up for the 100% renewable energy option. Also, we want to work with the utilities, city departments and organizations to ensure everyone is coordinated in this effort.
- v. Chair Knittle said that significant dollars have been released by the MassSave program that serves the income-eligible households for tenants and property owners to install heat pumps 100% covered by utilities.
- vi. Member Conna noted that this switch is voluntary for buildings, other than municipal buildings, so we can need to conduct outreach and incentivize them. He said that he understands that this goal will be difficult to meet but we are in a climate emergency so have to do it.
- vii. Member Covino shared that she thought there are many opportunities for approaching this goal. There are regulatory opportunities including policies for new developments such as requiring new developments to be built solar ready for the future. There is also the education and outreach of MassSave, reducing existing gas leaks and making sure that we have ample renewable energy available such as large solar projects or offshore wind. She suggested that we start with city buildings to build case studies and best practices to educate the public. Finally, we need to be aware of the federal regulations for building improvements in floodplains. There are regulations on investing in buildings that are located in floodplains which could eliminate the opportunity for some of these upgrades needed to electrify buildings. This is also an equity issue as there is a significant cross over between environmental justice communities and homes in floodplains such as Green Island.
- viii. Member Fournier said that it is really important to work with landlords to incentivize them to make their properties more energy efficient through insulation and air sealing. It is important to show that these changes are win-win-win by showing that they will save money and the buildings are healthier for tenants. Ms. Zhaurova asked how we can incentive landlords who don't pay for the utilities. Member Fournier replied that landlords could electrify their building and then pay the electricity bill as an incentive to attract tenants. Member Conna said that he thinks it's an important motivation to have tenants pay their own utilities which encourages them to use less electricity.
- ix. Member Conna mentioned that he read an article in the Chamber of Commerce newsletter which projected 2,300 new housing units would be built in the City in the near future and we are the

fastest growing city so he was wondering how the City can make sure new construction is green. Mr. Odell replied that Massachusetts passed a Roadmap for Massachusetts Climate Policy Act a year ago that allowed for a new building stretch code to be created that could require new buildings to be net-zero. The state is still finalizing the language of that code and communities can opt in or out when that happens. We cannot enforce a net-zero policy due to state laws as other communities have attempted to do. Once the code is effective, the city will have to decide if we will enforce it or not depending on the pros and cons. We need to consider who will bear the costs of the changes such as economic business concerns and costs for residents. Worcester is not a small affluent city so there are more concerns to consider and we need to do this thoughtfully.

- x. Ms. Zhaurova noted that building codes are improving and becoming more energy efficient over time especially since Worcester was designated as a Green Community by the state in 2010 when we adopted the original stretch code. We are looking forward to the updated stretch code from the state and interested in promoting adoption of it.
- xi. Member Conna asked when the new stretch code will go in place. Mr. Odell said that he thought it was going to be within a year from when the carbon reduction act was originally passed but the new stretch code is just a draft now. However, the draft is being commented on now so we are hoping that it will probably be approved within the next year.
- xii. Member Conna asked what steps can be taken right now in the absence of regulatory options. He asked if the city could do this voluntarily in the mean time until the new stretch code is in place. Mr. Odell replied that we want to encourage developers to build as sustainably as possible and it's on our list to determine how to do that but we don't know yet. There is also the TIF (Tax Increment Financing) municipal program incentivizing construction that can potentially be used to advance this goal.
- xiii. Member Herwitz asked if the City could create a building rating system such as Energy Star rating to be considered as a status symbol to use peer pressure as a tactic. Mr. Odell agreed that there are many building certification options such as LEED, and that investing in those are very low cost in comparison to the energy savings resulting from them, and that he hopes that peer pressure will encourage developers to do the right thing.
- xiv. Ms. Zhaurova added that there are rating tools such as "the Home MPG" which was a great idea and a powerful tool to drive change, but that the Real Estate Association was against it due to concerns around home sales being affected by using it.
- xv. Member Fournier shared that he invested in getting a home he built to be Energy Star certified but he didn't receive any return on that investment and just broke even. Therefore, there wasn't as much demand for an efficient home as he thought there would be. He believes this was partly because the real estate agents didn't publicize that certification widely for purchasers to understand it. Ms. Zhaurova replied that when people purchase homes they often ask about utility bills so the certifications would be helpful in comparing but it is possibly that the cost of a house is so large that it overshadows the utility cost considerations.
- xvi. Member Covino suggested residents go to city planning meetings to ask questions and share their opinions. If there is a lot of public support for something it can have an impact on developers. For example, residents could ask developers to use pervious surfaces, install solar panels and improve their storm water management plans. Ms. Zhaurova added that residents can also share their opinions for the City's current long range plan. She encouraged everyone to participate including filling out the survey online. Member Conna agreed that going to planning meetings and repeating these messages will also raise awareness of these topics and issues.

4. DSR Updates

- a. Summary of Earth Day communication
 - i. Ms. Davis shared a summary of what the DSR did for outreach and communications for Earth Day this year. Mr. Odell was interviewed by Spectrum 1 for a TV segment about Worcester's electricity aggregation program. Ms. Zhaurova was interviewed for an article in the T&G along

with three other Massachusetts communities on our sustainability initiatives focusing again on the City's aggregation program. Ms. Zhaurova and Ms. Burmeister did a radio segment for the Worcester Chamber of Commerce about the Green Worcester plan. Finally, the DSR created Earth Day social media series with a total of six posts on topics related to the DSR's work and priorities (**Attachment D**). They were posted across the City's Twitter, Facebook and Instagram accounts. She welcomed feedback or suggestions for how to improve for future posts and efforts to improve our social media presence. Chair Knittle replied that she thought the posts looked great.

b. Vacancy Recruitment

- i. Ms. Davis explained that the GWAC has a vacancy for a committee member from Council District 3. We haven't received applications recently so we are going to take a more proactive approach now to filling the last seat on the committee. She provided two flyers (**Attachment E**) to promote the vacancy and asked the GWAC to help circulate them widely and help promote the vacancy to get applications. Ms. Zhaurova noted that there was one applicant but they didn't attend the CAC meeting which meant they withdrew their application.
- c. Public communication by members outside meetings
 - i. Mr. Odell said that a GWAC committee member asked the DSR about the policy of making public statements such as writing articles and opinion pieces for local news outlets and if they are still able to do so now that they are a member of the GWAC. Mr. Odell spoke with the legal department to get an answer to this question. The legal department said that if you identify as a member of the committee, then you are deemed to be a representative of the City, whether you are hired or volunteering (as the GWAC members are). Therefore, if you identify yourself as a GWAC member then you would need to contact the DSR first who would then seek approval from the City Manager for the public communication. However, if you do not identify as a GWAC member in your public communication, it would still be prudent for the City to preview the public communication beforehand to determine if it will impact the City operations negatively or go against the City's position on a certain issue. We would appreciate that as a curtesy.

5. Old Business

- a. Strategic Communication Plan for the Committee
 - i. Member Herwitz noted that there is a difference between the strategic communication plan for the GWAC and the DSR. She asked how we can be effective in reaching out to the community. She proposed coordinating with City Councilors to organize meetings in their districts to educate councilors and residents in their districts. She asked the GWAC members what priorities they have for communications. Chair Knittle agreed with the ideas of engaging the City Councilors and asked DSR to create a social media post to promote the committee. Ms. Davis agreed to do that
 - ii. Member Fournier asked if there any rules to be aware of when promoting the GWAC's work as a personal business owner. Mr. Odell replied that as long as the rules of public communication are followed it's fine. Ms. Zhaurova added that what Member Fournier suggested is actually in line with the GWAC's charge (Attachment F) so it is encouraged.
 - iii. Member Conna suggested building our networks through local list servs and personal communications.
 - iv. Member Covino suggested a perk for groups to get involved in the GWAC's work could be giving them time to present what their group does at a future GWAC meeting.
 - v. Chair Knittle suggested the members all promote the event on May 26.
 - vi. Member Herwitz recommended that the GWAC members share a list with the DSR of all the groups they are involved with to create a master list of contacts and map out our networks. Chair Knittle will ask members to provide that list in the email she sends this week.

vii.	Member Covino asked if there are any specific GIS projects that are needed for implementation of GWP actions as she has interns that could help this summer. She suggested the DSR create a list of project ideas for when interns ask for ideas.	

6. Standing Items

- a. Received Communications
 - i. No communications received.
- b. Green Worcester Plan Action Updates
 - i. Mr. Odell provided a summary of actions taken since the last GWAC meeting. The DSR applied for three Municipal Vulnerability Preparedness action grants and we hope to hear back in August on if we were awarded any of them. The projects are storm water management at Crompton Park, rain garden at Flagg St. School and a master drainage system mapping project for the whole City. The DSR posted bids out for three electrical vehicle charging stations in three public garages Pearl Elm, Federal Plaza and Worcester Common. The DSR is working on our internal communication plan. We are in the bidding process for the alum dosing station at Indian Lake which will help mitigate the cyanobacteria outbreaks and hoping to eliminate or at least reduce beach closures. We are hoping that will be installed in the next month or so. The Green Worcester Plan (GWP) received an award from American Planning Association on May 2 for Excellence in Sustainability for a Community Wide initiative.
 - ii. Member Conna asked questions about the status of some of the actions from the Getting Started charts in the GWP. He asked if the DSR has developed a cross-departmental Green Worcester Implementation Committee and designated Green Worcester coordinators in each city department. Mr. Odell replied that we haven't done that yet but it is a priority for next year. Member Conna asked if there was a business representative for the Green Worcester Advisory Committee. Member Conna asked if the Worcester Climate Collaborative could be the climate change resilience working group that coordinates climate change priority actions as listed in Chapter 11 of the GWP. Mr. Odell replied that that is a great suggestion and we will consider it.
 - iii. Member Conna asked how the DSR and the GWAC can be involved in creating an education program for the schools. Mr. Odell said that there is a new superintendent of schools who will begin in July and we hope that the DSR can meet with them to discuss these topics. Mr. Zhaurova asked the GWAC members to share any examples of successful school sustainability programs. Member Covino said she would share examples from schools in Boston.
 - iv. Member Covino asked how the GWAC members can learn more about the other organizations in Worcester working on sustainability and resilience. We could have groups come and present to the committee or submit written updates on their work. Mr. Odell said that the DSR could gather information from other groups, particularly those who were involved in the creation of the GWP. Member Covino suggested that the DSR ask those groups if those groups have read the final plan and taken any of the actions listed in it.
- c. Ms. Zhaurova shared that the next GWAC meeting planned for June 20 needs to be rescheduled due to a new City holiday, Juneteenth on June 19. Therefore, we propose rescheduling our June 20 meeting to June 27 in Esther Howland room. Chair Knittle said that she is unavailable that day to facilitate the meeting but the Vice Chair, Member Covino, offered to chair the meeting in her absence. The committee agreed to move the meeting to June 27.

Adjournment: 7:22pm

The Committee voted to adjourn the meeting at 7:22 pm.

Attachments

Attachment A: DSR's Departmental Developmental Plan

Attachment B: GWP Getting Started Charts

Attachment C: Discussion of strategy to achieve GWP goal of 100% zero-carbon buildings citywide by 2045

Attachment D: Earth Day Social Media Posts 2022

Attachment E: Green Worcester Advisory Committee Vacancy Recruitment Flyers

Attachment F: Green Worcester Advisory Committee Charge

Department of Sustainability & Resilience

John Odell

Worcester City Hall 455 Main Street, Room 108 Worcester, MA 01608 508-799-8325

Mission:

To implement the ambitious and urgent goals of the Green Worcester Sustainability and Resilience Strategic Plan (GWP). To be a strong and reliable advisory and collaborative partner which supports integration of sustainability and resilience and leveraging projects' co-benefits, into all functions of the City via policies, projects, and initiatives. To use the lenses of health, equity and prosperity to guide projects.

Vision:

To help the city become the most sustainable and climate-resilient mid-sized city in America by 2050.

Goal 1: Reduce Carbon Emissions

City Priority Area: Sound Fiscal and Operational Government; Vibrant, Thriving City

Objective 1: Measure and Communicate Progress toward Community and Municipal Energy and Carbon Reductions

Initiative(s)	Measure
Develop and publish at least 3 analyses and reports quantifying ongoing carbon reductions and other sustainability projects including the Carbon Avoidance Report, Better Climate Building Challenge Report, and CY 2022 greenhouse gas emissions inventory.	Number of reports published
Publish the annual GWP Report by Q4 and present to the Green Worcester Advisory Committee.	Number of reports publishedNumber of presentations made

Objective 2: Advance Buildings' Sustainability and Energy Use Reduction via Policy, Planning, Projects & Advocacy

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Initiative(s)	Measure
Conduct 1 Life Cycle Analysis of electrification options for the	Analyses conducted
Frances Perkins Library, identify preferable option and assist	
DPF with implementation (if funding allows).	
Conduct 1 feasibility study of City Hall as a net zero building.	Studies conducted
10+ projects identified and/or implemented for sustainable	Projects identified
building improvements.	Projects implemented
Certify 3 municipal buildings with Energy Star Rating.	Buildings certified
Develop 1 strategic plan and draft zoning ordinance	Ordinances drafted
amendment for transforming triple-decker neighborhoods,	
most of which are home to in the Environmental Justice (EJ)	
areas, with an integrated approach related to zoning, energy	
efficiency, and sustainability, and more.	
Develop and submit to City Council 1 draft Building Energy	 Drafts presented to City Council
Disclosure Policy for non-residential buildings that meet a	
size threshold.	
Continue to increase the percentage of green electricity in	Percentage of green energy
the supply of Aggregation Program, advancing to a goal of	
100% renewable electricity by 2030.	



Initiative(s)	Measure
Complete a study identifying energy efficiency barriers with a special focus on low-income and minority residents, and prioritize high impact efforts to overcome them.	Studies completed
Obtain DPU approval for the Aggregation Plan Amendment by incorporating the results of the barrier study (above) and requesting a higher adder fee to assist low income and minority residents with overcoming them.	Plans approved by DPU

Objective 3: Manage Municipal Renewable Energy Systems

Initiative(s)	Measure
Reduce outstanding PowerDash outage alerts by 75%.	Reduction in outage alerts
Maintain greater than 90% potential electricity output across all solar arrays.	Potential Electricity output

Goal 2: Advance Climate Change Resilience

City Priority Area: Vibrant, Thriving City; Opportunity for All; Sound Fiscal and Operational Government

Objective 1: <u>Urban Heat:</u> Implement recommendations of the "Neighborhood-Based Urban Heat Risk Assessment" project (by Dr. Brian Stone and Evan Mallen), with a focus on EJ areas.

Initiative(s)	Measure
Identify minimum 3 areas to focus on which fall within qualified census tracts as defined by ARPA.	Areas identified
Collaborate with Parks staff and the Urban Forest Commission to prioritize those areas for tree planting.	Trees planted
Implement recommendations in at least one identified area in FY23.	Recommendations implemented in identified areas

Objective 2: Flooding: Facilitate and collaborate with DPW&P on a Drainage & Green Infrastructure Master Plan.

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Initiative(s)	Measure
Develop a pipeline of 5 green infrastructure projects with a	Number of projects
beneficial Benefit/Cost ratio per EPA guidelines	
Collaborate with Higher Educational Institutions to advance	Number of projects
the GWP goals and facilitate 2 student projects completed on	
a GWP topic.	

Goal 3: Advance Mobility Transformation

City Priority Area: Sound Fiscal and Operational Government

Objective 1: Manage Urban Mobility Master Plan development (via consultants) and ensure meaningful involvement of the community, GWAC, and city staff, and especially historically underserved communities.

Initiative(s)	Measure
Publish 1 Mobility Master Plan to the city website including GIS Maps with proposed bikeway and sidewalk networks, and enhanced Blue Spaces Access.	 Number of plans published Number of desired features included in plan

Objective 2: Promote, Facilitate and Manage Expansion and Operation of Vehicles' Electrification

Initiative(s)	Measure
Install 16 EVCS in public garages	Number of EVCS
Install minimum 4 EVCS for municipal fleet EVs.	Number of EVCS



Initiative(s)	Measure
Assist with purchasing 10 EVs for municipal fleets (if	Number of EVs purchased
available)	
Maintain existing municipal EVCSs via Charge Point	Percentage of EVs maintained
Warranty program.	
Investigate possibility and funding for EV school buses and	Number of memos written
chargers. Summarize in at least 1 memo with next steps.	

Goal 4: Support and Grow Lakes and Ponds Program

City Priority Area: Vibrant, Thriving City; Strong Neighborhoods

Objective 1. Monitor and Continuously Improve Water Quality for the Habitat and Recreation

Initiative(s)	Measure
Gather quality controlled data to determine threats to lakes, inform management decisions, and measure efficacy of management at the four primary program lakes - Bell Pond, Coes Reservoir, Indian Lake, and Lake Quinsigamond.	Number of lakes being monitored
Conduct cyanobacteria and invasive aquatic plant treatments as needed.	Number of treatments performed
Manage construction and operation of 1 Alum Dosing Station Project at Indian Lake.	Number of Alum Dosing Stations completed
Install 1 boat washing stations at Indian Lake	Number of stations installed
Install kayak and boat washing station at Coes Reservoir.	Number of stations installed
Conduct projects that keep geese away from the beaches.	Number of projects
Participate in stormwater biofiltration projects (planning & design).	Number of projects

Objective 2. Grow the Lakes and Ponds Program to protect and formally monitor and manage 4 more water bodies in Worcester (for a total of 8) for cyanobacteria, invasive aquatic plants, and other applicable parameters

Initiative(s)	Measure
Develop Management Plans for the 4 new Lakes and Ponds	Number of plans developed

Objective 3. Education and Outreach: Engage the community by creating opportunities to learn and play

Initiative(s)	Measure
Conduct 1 Woo Angler Series	Number of events held
Work with local groups to identify and pilot litter solutions	Number of groups engaged
	Number of solutions identified
Manage Worcester Cyanobacteria Monitoring Collaborative -	Number of lakes
22 lakes, 35 trained volunteers	Number of volunteers
Develop and air 3 Blue Space Minute videos	Number of videos aired
Hold 1 Annual State of the Lakes annual report and	Number of presentations
presentation	·

Goal 5: Educate, Effectively Communicate and Facilitate Action at the Community Level

City Priority Areas: Vibrant, Thriving City; Strong Neighborhoods

Objective 1: Foster community engagement

Objective 1. Poster community engagement	
Initiative(s)	Measure
Complete Strategic Communication Plan by the end of Q1 and start implementation immediately thereafter	Number of plans developed
Communicate monthly on the green initiatives of interest via media and social media channels.	Number of communications made



Initiative(s)	Measure
Provide 3 sustainability and resilience data metrics to be	Number of metrics provided
displayed on municipal Open Data Portal, and update quarterly.	
Revamp the www.WorcesterEnergy.org website by renaming it	Number of new pieces of content
and creating fresh and relevant content.	

Goal 6: Maintain Structural Support for ongoing GWP Implementation

City Priority Area: Sound Fiscal and Operational Government; Vibrant, Thriving City; Strong Neighborhoods

Objective 1: Establish Municipal Organizational Structure to advance GWP goals

Initiative(s)	Measure		
Administer GWAC meetings (~monthly) and follow-up on	 Number of GWAC meetings held 		
requests as needed.	Number of requested followed up		
Provide and present annual reports to the GWAC.	Number of reports presented		
Establish an Interdepartmental Green Team (IGT) and meet at	Number of IGT meetings held		
least quarterly, breaking up into subgroups by topics if			
necessary, such as resilience, building energy efficiency, and			
vehicle electrification.			

Objective 2: Develop project evaluation and selection criteria (Sustainable Project Score Card) in collaboration with the GWAC and IGT to be used for review of municipal projects and non-municipal projects that accept municipal incentives (CDBG, TIFF, and more) and Incorporate equity, health and prosperity lenses

Initiative(s)	Measure
Pilot the Score card with 3 municipal projects	Number of projects

Goal 7: Work Toward with Zero Waste Goal of the GWP

City Priority Area: Vibrant, Thriving City; Strong Neighborhoods

Objective 1: Communicate and encourage waste reduction by city's residents and businesses

- Journal - Communicate and choosing a nation of the first of the control and additional additional and additional additio		
Initiative(s)	Measure	
Develop 1 Zero Waste Master Plan.	Number of plans developed	
Attend 4 community events to talk about zero waste topics.	Number of events attended	

Previous Year DDP Highlights

- 1st year of the new Department of Sustainability & Resilience.
- Assisted with establishment and staffing of the Green Worcester Advisory Committee.
- Applied for the Municipal Vulnerability Preparedness grant to advance community resilience (up to \$3 million).
- Completed Greenhouse Gas Emissions Inventory, baseline year 2009, compared to 2019.
- Assisted with EV purchasing decisions; advanced to procurement of EV charging stations; applied for grants; started developing fleet electrification program.
- Oversaw development of the "Neighborhood-Based Urban Heat Risk Assessment".
- Assisted with development framework of the future Department of Transportation & Urban Mobility.
- Prepared for the launch of the Urban Mobility Master Plan.
- Contributed to the energy policy discussions and potential amendments.
- Developed a Green Worcester Plan annual report.

Department Allocation Summary

[For budget use only]

Operating Budget Highlights



Green Worcester Plan: Getting Started

Most chapters of Green Worcester Plan conclude with a "Getting Started" chart which provides early actions that be taken by government, businesses, institutions/non-profits and households/individuals. The charts and the pages they can be found on in the plan are included below. The full plan can be found at worcesterma.gov/sustainability-resilience/green-worcester.

Chapter II. The Green Worcester Approach: Stewardship, Transparency, and Accountability (page 43)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Create the Department of Sustainability and Green Worcester Advisory Committee. Designate Green Worcester coordinators in each City department and a cross-departmental Green Worcester Implementation Committee. Join the Global Convenant of Mayors for Climate and Energy. Join the Urban Sustainability Directors' Network. 	 Endorse the Green Worcester Plan. Designate a representative for the Green Worcester Advisory Committee. Create a Green Worcester or Sustainability and Resilience group at the Greater Worcester Regional Chamber of Commerce. 	Endorse the Green Worcester Plan. Begin working with the City and assisting in fund-raising to create a citywide umbrella sustainability/resilience coordinating network to link existing organizations, provide public information and access to ongoing activities, and work with the City and other partners to achieve Green Worcester goals.	Ask your neighborhood organization or other civic organization to endorse the Green Worcester Plan.

Chapter III. 100% Clean and Affordable Energy (page 54)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Continue the energy-efficiency and renewable energy program for city facilities. Update and publish the GHG emissions inventory Opt in to PACE programs when available. Seek membership in the Carbon Neutral Cities Alliance. Begin developing a climate budget. 	 Continue and establish new energy conservation and renewable energy projects. Work through the Chamber of Commerce to help resolve issues with the utility. 	 Continue energy conservation and renewable energy projects. Collaborate with the City to create information and data to accelerate renewable energy projects. 	 Choose 100% renewable energy sources through the Community Choice Aggregation Program. Find out your carbon footprint from online tools and work to reduce it.

Chapter IV. Connected Green and Blue Spaces with Healthy Natural Systems (page 64)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Develop an Urban Forestry Plan. Enhance sustainability and climate change resilience strategies in the Open Space and Recreation Plan. 	Include green spaces and trees, and minimize impervious surfaces in business locations.	■ Continue and expand use of best practices for landscape management, minimizing impervious surfaces.	 Minimize use of fertilizers and herbicides. Plant native species and avoid invasive species. Minimize impervious surfaces.

Chapter V. Net Zero and Climate Resilient Buildings (page 73)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Aggressively promote Mass Save audits and implementation of insulation recommendations. Make energy efficiency retrofits mandatory for any programs that receive City funding assistance. Adopt a policy for new municipal construction to be net zero. Develop a Municipal Strategic Building Energy Management Plan. 	■ Use the audits, assistance and rebates from Mass Save to establish energy efficient and renewable energy systems in businesses.	Continue and expand energy efficiency and renewable energy initiatives in buildings.	 Request a Mass Save audit and make improvements with rebates. Invest in electric heating and cooling systems (heat pumps).

Chapter VI. Sustainable Transportation Choices (page 90)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Make emissions reduction and connected networks explicit goals and criteria for city transportation planning. Identify Complete Streets priority projects for implementation Develop a Pedestrian, Bicycle, and Micromobility Plan. Create an Open Streets program with routes to encourage walking and biking. Establish programs for flexible commuting and work from home for city employees. 	 Establish flexible commuting and work from home programs as feasible. Provide bicycle parking for employees and customers. 	 Establish flexible commuting and work from home programs as feasible. Provide or enhance bicycle routes and parking. 	Choose to walk or bike to destinations within three miles of home.

Chapter VII. One Water: Integrated Water Management (page 102)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Establish standards to promote green infrastructure and minimize nonpoint source pollution. Install signage at green infrastructure sites to raise public awareness about benefits. Use Integrated Pest Management and organic landscape management practices. 	Minimize impervious surfaces and incorporate stormwater best management practices, including green infrastructure and organic landscape practices.	 Minimize impervious surfaces and incorporate stormwater best management practices and green infrastructure and organic landscape practices. 	 Avoid using synthetic fertilizers, herbicides, and insecticides. Use pervious surface materials for driveways, patios, paths and other hardscape elements to enhance infiltration of rainwater. Incorporate rain gardens, swales, and similar stormwater management elements in residential landscapes.

Chapter VIII. Towards Zero Waste (page 110)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Develop a Zero Waste Master Plan. Adopt an Extended Producer Responsibility purchasing ordinance. 	Ensure compliance with state recycling requirements.	Continue and expand policies and practices to avoid excessive waste including Extended Producer Responsibility for purchasing.	 Ensure that your recyclables are not contaminated. Compost your waste if you have a backyard. Seek out and buy products that do not have excessive packaging. Avoid one-time use plastics and other disposable products.

Chapter IX. Sustainable Food Systems (page 118)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Strengthen the Farm to School Program in WPS Develop options to help protect community gar- dens and urban farms through acquisition or long term leases. 	Buy local food products and support the local food economy.	Buy local food products and support the local food economy.	Buy local food products.

Chapter X. Pollution Prevention (page 124)

Government	Business	Institutions/Nonprofits	Households/Individuals
Update the City's Environmentally Preferable Purchasing Policy.	Adopt policies to avoid toxic materials.	Adopt environmentally preferable purchasing policies.	Avoid purchasing products with toxic materials.

Chapter XI. Climate Change Resilience (page 113)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Create a climate change resilience working group through the Department of Sustainability to coordinate climate change priority actions. 	Identify climate change vulnerabilities of the business and employees and make a plan to mitigate them.	Identify climate change vulnerabilities of the institution, employees, and people who receive services, and make a plan to mitigate them.	Identify climate change impacts that can affect you and your family, seek information about how you can mitigate potential impacts and how you can seek assistance if needed.

Chapter XII. Sustainability, Resilience, and Green Education in All Policies (page 142)

Government	Business	Institutions/Nonprofits	Households/Individuals
 Create a robust green education program in the schools Create a robust public outreach and education program Incorporate Green Worcester into the Comprehensive Plan. Promote broad participation in the planning process, especially from environmental justice populations and neighborhoods Convene a working group on green jobs 	Participate in the	Participate in the	Participate in the
	comprehensive	comprehensive planning	comprehensive plan-
	planning process	process	ning process

GWAC 5/9/22, Agenda item 3c:

comments submitted by Ted Conna

Discussion of strategy to achieve GWP goal of 100% zero-carbon buildings citywide by 2045

What's needed to pull this off:

<u>Building upgrades</u>: before electrification, buildings may need some or all of these, which can be done any time weather allows:

- -insulation
- -air-sealing
- -window replacement
- -electric service upgrades (some old triple decker apartments still have 20A service, which is tiny)

Then,

-electrification of the heating system, with heat pump(s). By far the most economically sensible time to do this is when the heating system needs replacing anyway (which happens every ~25-30 years - see below*) This is identified as a Getting Started step for individuals on GWP p.73, but a great deal of prep is needed to make that feasible.

Plus:

- -oil tank removal after electrification
- -appliance conversions:
 - -stoves, dryers (any time)
 - -hot water heaters (may be tied to heat pump heating system)

Prep needed:

- -Utility upgrades:
 - -System capacity must be upgraded to handle added electric loads.
 - -Load peaks will shift: peak loads will occur in coldest winter weather when heat pumps rely on electric resistance heating for backup, which draws far more power
 - -Smart meters and central coordination would allow some flattening of the load curve by shifting some of the morning heating demand to low-load earlier morning hours (before 6am)
- -Public Education
- -Utility/Government Funding Programs
- -* Baseline data collection:
 - -Need to ID existing building energy and heating systems asap: fuel source, type, and age of system
 - -Info sources (some information is public, some is not):
 - -National Grid
 - -Eversource heating rates ID accounts with gas heating
 - -heating oil dealers
 - -Fire Department permits oil storage tanks
 - -Code Department building permits may ID heating system type/installation date
 - -Assessing Department
 - -Insurance companies
 - -Mortgage holders
 - -MassSave
 - -ID older heating systems to target owners for outreach/incentives/funding
 - -Opportunity for interdisciplinary collaboration w/ local graduate programs (GWP p.54 Getting Started)
 - -WPI: engineering
 - -Clark: public policy, data analytics, community development & planning, env. science & policy
 - -Outside consultant might be needed to guide this effort, define research goals/guidelines

Earth Day/Week Social Media Posts 2022

Friday, 4/22: On this Earth Day and 1st anniversary of the <u>Green Worcester Plan</u> adoption, we are working harder than ever on sustainability. The City recently committed to cutting its municipal carbon emissions by at least half within 10 years as a partner in the Department of Energy's <u>Better Climate</u> <u>Challenge</u>, the first Massachusetts municipality to do so!





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9:05 AM · Apr 22, 2022 · Twitter Web App

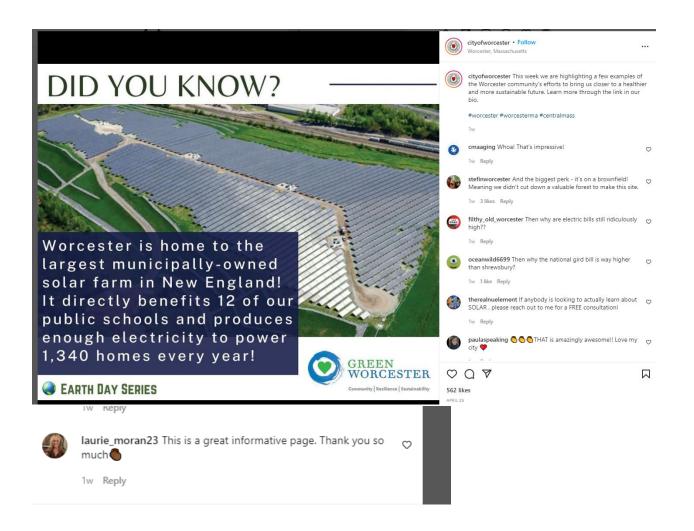
2 Retweets 1 Quote Tweet 9 Likes

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DID YOU KNOW?



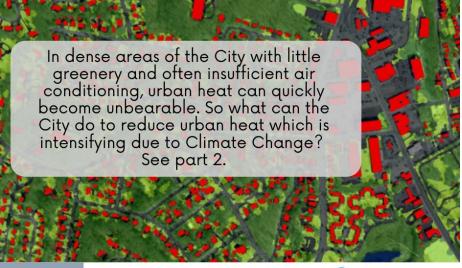




Tuesday, 4/26: Resilience

Did you know that urban heat can kill?





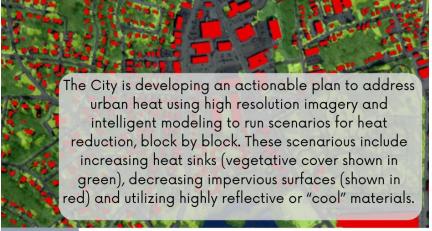
PART 1





Did you know that urban heat can kill?



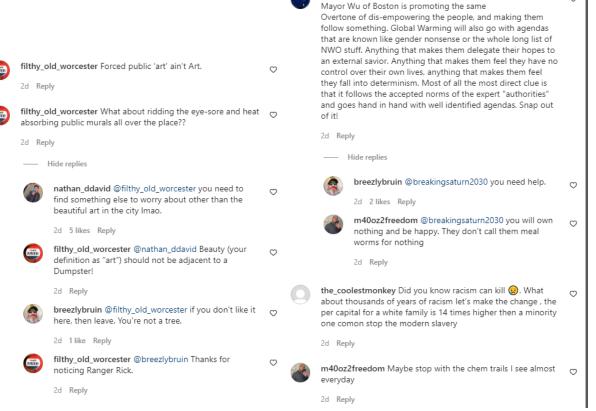


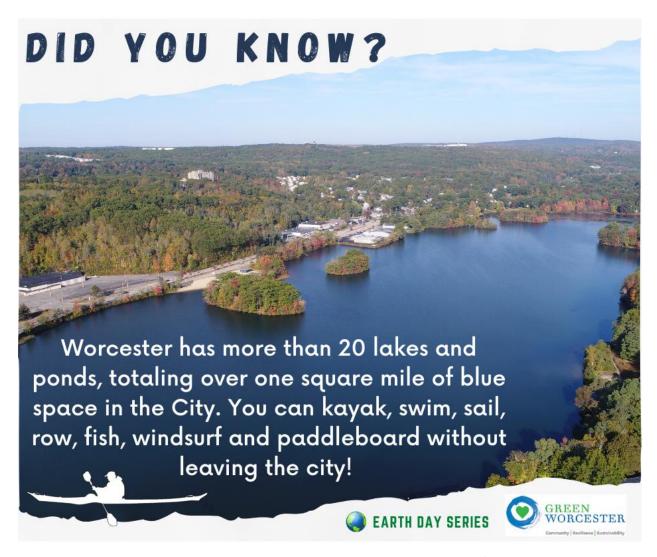
PART 2



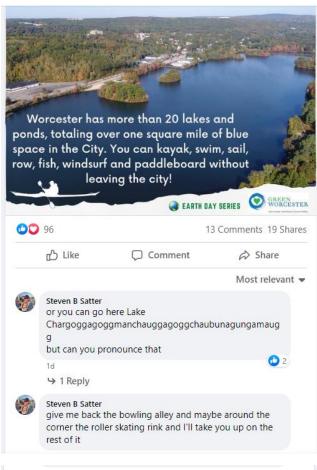




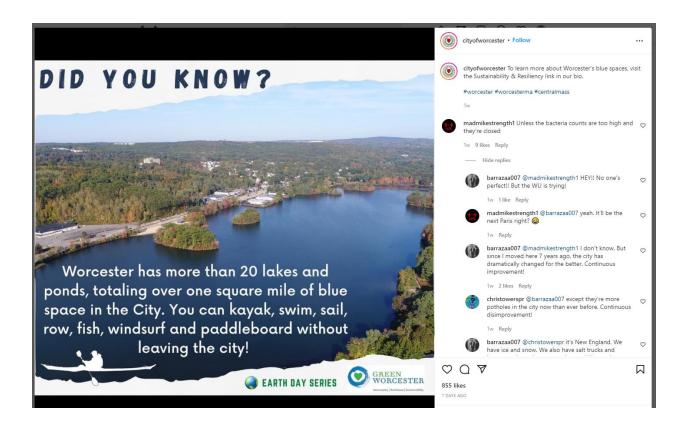


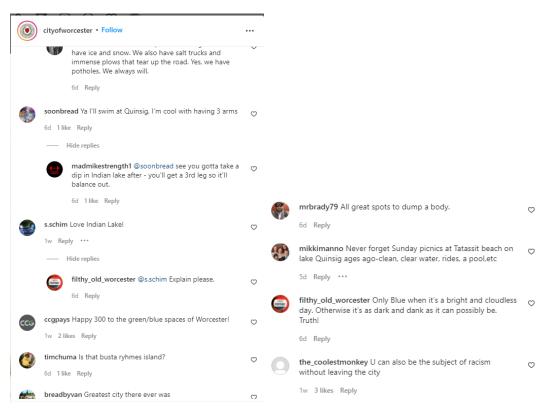


To learn more about how we protect our blue spaces go to WorcesterMA.gov/BlueSpace and to find out how to access them go to WorcesterMA.gov/city-parks.



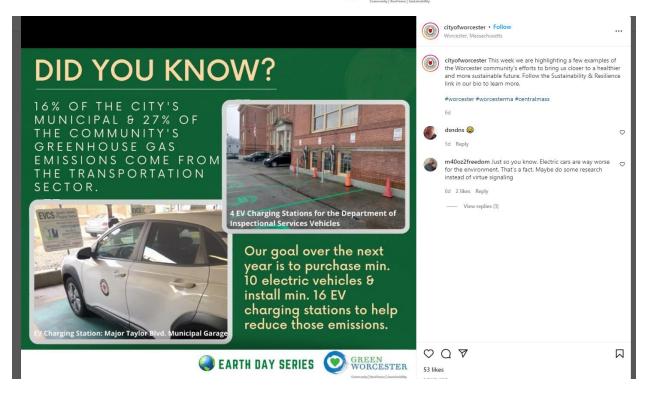






Thursday, 4/28: EVs & EVCS

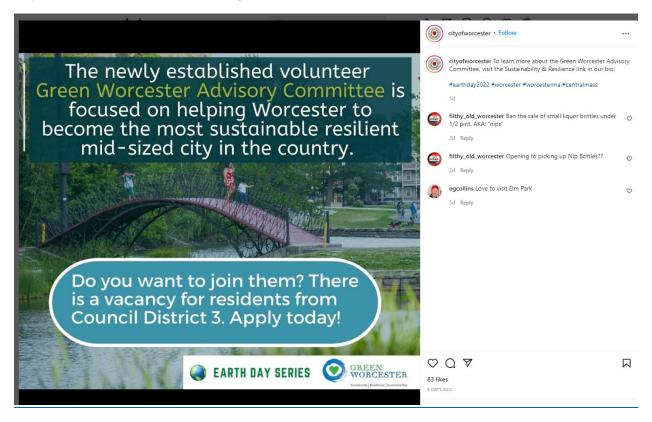




Friday, 4/29: GWAC



To learn more about the Green Worcester Advisory's Charge and how to apply go to: Profile Details City of Worcester, MA (worcesterma.gov)



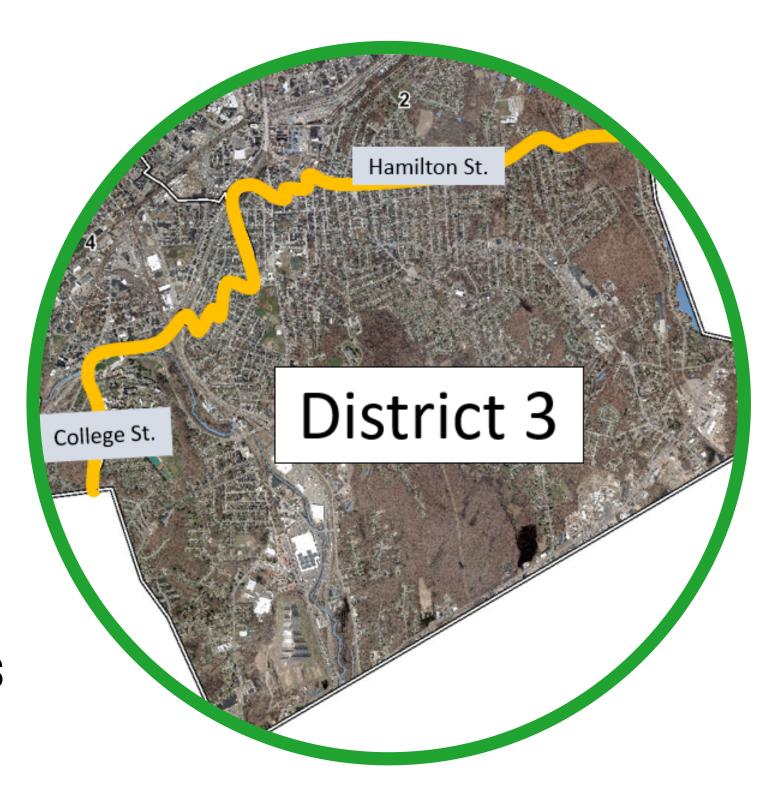


APPLY TO SERVE ON THE GREEN WORCESTER ADVISORY COMMITTEE TODAY!

The Green Worcester Advisory
Committee is focused on
helping Worcester to become
the most sustainable and
resilient mid-sized city in the
country.



There is a vacancy for residents from Council District 3.





Apply at worcesterma.gov/boards-commissions or scan the QR code to go directly to the committee's page.

For more information, email GreenWorcester@worcesterma.gov.



APPLY TO SERVE ON THE GREEN WORCESTER ADVISORY COMMITTEE TODAY!



Are you a Worcester resident who is concerned with issues of environmental sustainability and resilience?



Have you been a resident in Council District 3 for more than 1 year?



Do you want to help the City achieve the goals in the Green Worcester Plan?



Apply at worcesterma.gov/boards-commissions or scan the QR code to go directly to the committee's page.

For more information, email GreenWorcester@worcesterma.gov.







Green Worcester Advisory Committee Charge

Approved March 7, 2022

The Green Worcester Advisory Committee is charged with assisting in the implementation of the Green Worcester Plan actions.

Communication:

- 1. Develop, revise as needed, and implement an effective external communication strategy to advance Green Worcester Plan goals.
- Assist with outreach and education about Green Worcester Plan actions by the businesses, institutions & nonprofits, households & individuals ("Getting Started" sections at the end of each chapter).
- 3. Serve as a transparent channel of providing information to the public and other external stakeholders about the City's efforts to advance Green Worcester Plan goals and actions.
- 4. Serve as a sounding board for new initiatives and opportunities within the community aligned with the Green Worcester Plan goals and actions.

Project Prioritization and Review:

- 1. Assist annually with prioritization of short term and long term municipal and community Green Worcester Plan actions.
- 2. Assist with the development of the Sustainable Project Score Card, which will incorporate the three Green Worcester Plan lenses equity, health and prosperity.
- 3. Review and advise on upcoming municipal projects using the Sustainable Project Score Card.