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Resilient Watertown Climate & Energy Plan:
Implementation Update

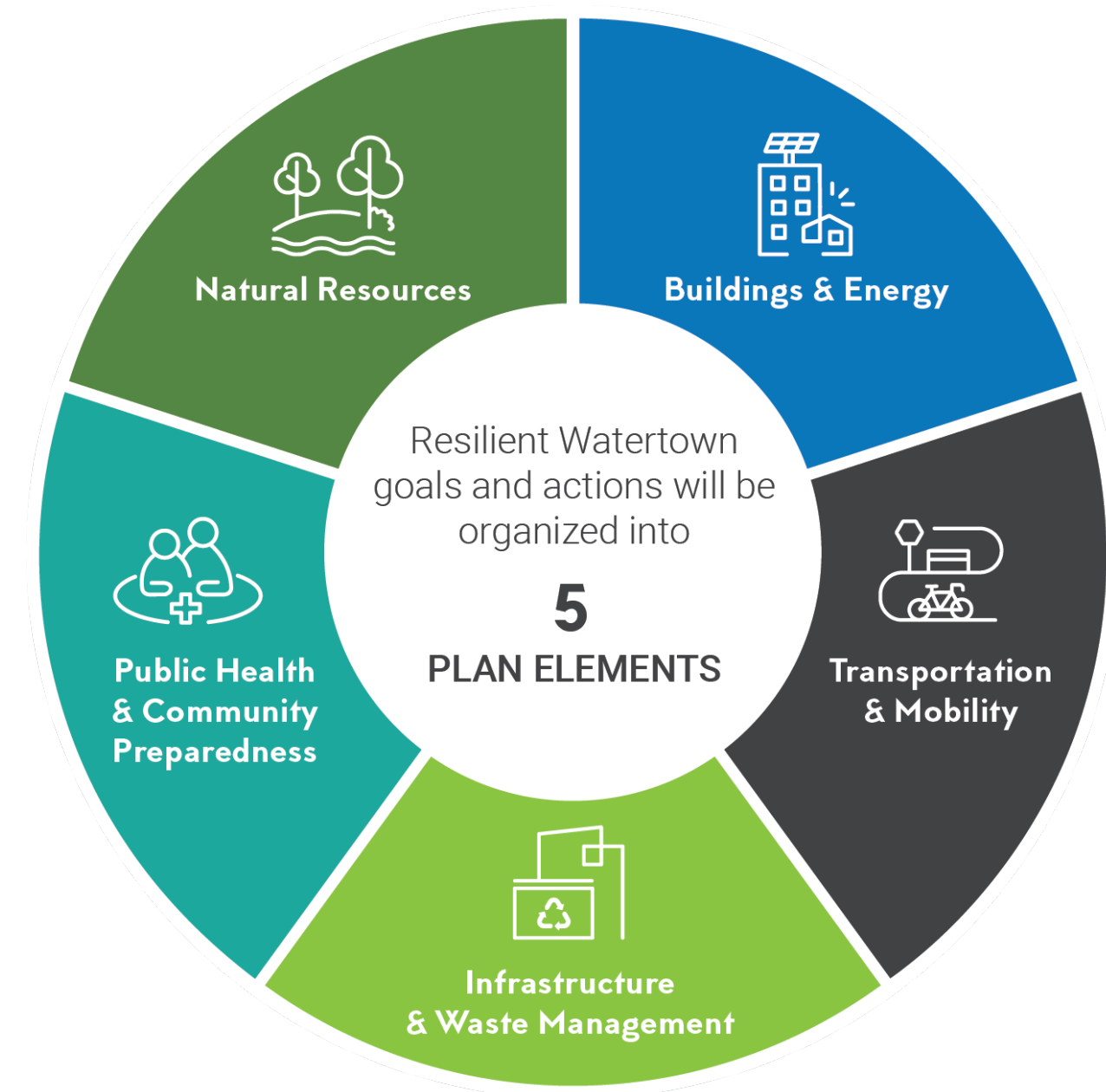


Agenda

1. Introduction
2. Strategy and Action Updates as of Jan. 2024
3. Next Steps
4. BERDO Legislation Overview



Plan Elements and Organization



- Each Plan Element follows the structure:
 - Goal: what we want to accomplish; broad statement
 - Strategy: How we will accomplish it as a general approach
 - Action: *Specific activity that will be undertaken*
 - Action
 - Etc.
- Each Plan Element has quantifiable metrics for tracking our progress
- For every Action we identify a lead entity, cost magnitude, timeframe, and contribution to mitigation, resilience, or both
- The plan will be reviewed internally every year and will undergo a substantial re-evaluation every 5 years to update actions and targets according to new trends, technologies, and issues




Year 1 and Year 2 Actions

- Actions were split into two groups: those to be launched in Year 1 and those to be launched in Year 2 (roughly 30-35 in each group)
- Year 1 Actions:
 - 32 of 34 are underway; 3 are complete
- Year 2 Actions:
 - 12 of 28 are underway
- Likely that a number of actions will be launched Year 3 or later
- Full tracking spreadsheet will be made publicly available



Cross-Cutting Strategies Updates

- CC1: Add capacity and resources to the Energy Manager's Office, the DPW Forestry Division, and DCDDP in order to successfully implement the plan
 - [Additional capacity needed for energy-related work](#)
- CC2: Create an overarching *Resilient Watertown* Outreach & Education Campaign 
 - [See next slide](#)
- CC4: Collaborate regionally with other communities and entities
 - [Resilient Mystic Collaborative; Charles River Climate Compact; MAPC Metro Mayors Coalition; Multi-town gas leaks working group; statewide Building Electrification Accelerator; Charles River Chamber Environmental Committee; Zero Carbon MA](#)
- CC6: Encourage and require sustainable, climate-resilient development patterns
 - [Watertown Square Plan process \(underway\) will serve as a pilot for these changes](#)
 - [Comprehensive zoning and development regulation review and overhaul forthcoming](#)



Outreach and Education Updates

- CC2: Create an overarching *Resilient Watertown* Outreach & Education Campaign
- Actions BE1.3, BE3.2, TM1.3, NR2.2, NR3.1, NR3.2, NR4.3, IW1.2, PH1.1, PH3.3
 - Formed a WE3C Working Group dedicated to plan-related outreach- current focus is revamping the RW website to be action-oriented for both newcomers and sustainability savants
 - Launched the Resilient Watertown Newsletter and producing several social media posts per month
 - Tabled at Farmers Market (monthly) and Faire on the Square
 - Staff participated in Trees for Watertown's Annual Meeting and a briefing on "Make Polluters Pay" state legislation
 - Completed annual report for [Mayor's Monarch Pledge](#), December 2023; re-pledged for 2024
 - Coordinating efforts with a new coalition called Watertown Pollinator Pathways
 - Created publicly available [pollinator garden map](#) and [EV charging station map](#)
 - Installing pollinator garden signage and informational tags on newly planted street trees
 - Arts and Culture tie-ins with "Edible Watertown" programming
 - Coordinating with WE3C, Stormwater, Bike/Ped, and Solid Waste Advisory Committees, Hatch Makerspace, as well as local advocacy groups to enhance each other's efforts



Resilient Watertown Newsletter

- Launched September 2023
- 3 issues so far; goal is monthly
- Includes:
 - Local climate news
 - Upcoming events
 - Program spotlights
 - Ways to get involved

→ [Sign up here!](#)



Resilient Watertown Newsletter December 2023

Hello and happy holidays! As temperatures drop we hope you are staying warm. If you want to lower your heating and electricity bills this winter, be sure to sign up for a free Energy Audit at the links further down this page.

The holiday season often comes with a lot of waste: shopping bags, gift wrapping, excess packaging, and more. Here are some tips to help reduce waste this year!

- Use tablecloths or napkins as wrapping paper
- Shop local and patronize small businesses (and bring your own shopping bag)
- Give "experience" gifts like memberships or event tickets
- Opt for reusable dinnerware for holiday parties

Have a safe and joyful holiday season and a happy New Year. Please forward this email to friends and family so [they can sign up too!](#)




Local Climate News

Watertown Submits Annual Report for Mayor's Monarch Pledge
Last year, City Manager Proakis signed the National Wildlife Foundation's "Mayor's

Buildings & Energy Updates



- **BE 2.1: Adopt the state's net-zero energy standard as soon as permissible** 
 - Watertown was the first municipality in the state to adopt the net-zero code in Jan '23. New code went into effect July 2023.
- BE 2.4: Work with municipalities to eliminate fossil fuels
 - Staff participating in Multi-Town Gas Leaks Initiative and statewide Building Electrification Accelerator
- BE 3.1: Investigate development of geo-microgrid pilot programs
 - City Hall complex under evaluation for ground-source heat pump system
- BE 3.3: Incentivize the transition to heat pumps
 - Energy Advocate is helping residents access heat pump rebates through Mass Save
- BE 4.1: Enact a Building Energy Use Disclosure Ordinance with a reporting requirement
 - Draft legislation phase (more on this later)
- BE 4.2: Provide technical assistance for clean energy, energy efficiency, and financing activities
 - Energy Advocate has been assisting residents since September on accessing and navigating Mass Save energy efficiency programs/incentives. More capacity is needed for clean energy and financing.
- BE 4.3: Upgrade major existing municipal facilities to achieve net zero energy performance
 - DPB study of City Hall, library, and Parker office building underway
 - Net-zero high school currently under construction
 - Solar canopy at Lowell School ready to be turned on by Eversource
 - LOI to install solar on middle school

Transportation & Mobility Updates

- TM 1.1: Install well-shaded bike/ped-only infrastructure, especially in densely developed areas and areas of high traffic volume
 - Watertown Square Area Plan design charrette recently took place & team is iterating conceptual designs, which include connecting sections along Community Path with low stress, high quality bike/ped facilities
 - Off-street bike/ped Community Path gap btwn Waverley and Main streets being filled in/connected
 - Galen St bike/ped facilities are nearing completion- bike/bus only lane open, sidewalks being reconstructed, traffic signals responsive/incorporating cyclists
 - Coolidge Ave bike/ped path under construction; wayfinding, crossings & other work being done
 - Safety improvements to crossing along Watertown-Cambridge Path at Arsenal Way being completed
- TM 1.2: Collaborate regionally to increase and improve pathways for bikes and pedestrians
 - Continued coordination with MBTA on incorporating bike/ped infrastructure within their projects, particularly along Arsenal, Pleasant, and in the Squares
- TM 1.3: Increase use of transit, bike, and pedestrian travel through outreach, incentives, and policy changes
 - Expansion of transit options including carshare, carpool/vanpool, and shuttles in coordination with TMA and new development projects
 - Expansion of bikeshare stations in progress for 2024 season
 - Bicycle parking zoning regulations under study for improvement
- TM 1.5: Implement bus prioritization projects
 - Watertown and MBTA in discussion about locations and options for bus prioritization including dedicated bus lanes, transit signal priority, all-door boarding
- TM 1.6: Develop an integrated, publicly accessible electric transit system that connects to MBTA
 - Received ARPA funds for a study for City-supported local transit, including microtransit
 - Working on MassDOT Transit Innovation grant application for a microtransit project in partnership with TMA

Transportation & Mobility Updates

- TM 2.1: Develop and implement an EV Roadmap for Watertown
 - Collected baseline data of EV registrations and mapping existing/planned charging stations
 - Initial stage of EV fleet transition and charging infrastructure study (FY24 budget item)
 - DPW has developed a fleet replacement schedule based on end-of-life, cost, market availability, etc.
 - Initial identification of “low hanging fruit” opportunities for additional municipal charging locations
 - Developing RFP for consultant help on feasibility and phasing of more challenging areas/gaps in service
- TM 2.2: Transition all City-owned, leased, and contracted vehicles to electric, including school bus, garbage truck, and maintenance fleets
 - [See above](#)
- TM 2.5: Increase the availability of charging stations on municipal property
 - 3 chargers installed at Howard Street parking lot
 - 1 charger installed at the Lowell School; currently adding capacity for more
 - Several locations submitted for Eversource Make-Ready grants
 - Partnering with Witricity to create demonstration site for wireless EV charging

Natural Resources Updates

- NR 1.1: Incorporate pocket parks into neighborhoods lacking green space
 - Watertown Square project: participants have highlighted need for open/public space
- NR 1.2: Promote biodiversity improvements to existing and new parks and open space
 - Microforest project (see next slide)
- NR 1.3: Acquire more open space, where possible, and create more open space on private property
 - Walker Pond parcel acquired Dec. '22; CPC application submitted for open space and recreation spaces
 - Multiple acres of public open spaces planned/underway at 66 Galen/99 Water; 99 Coolidge St; Watertown Mall site
- NR 1.4: Establish and protect natural habitat corridors along water bodies, trails, and easement areas
 - WCG group focused on removing invasive plant species along Watertown-Cambridge Greenway in 2023
- NR 2.1: Establish an enforceable tree ordinance
 - Draft tree ordinance under review by DPW and resident advocates
- NR 2.3: Increase tree plantings and prioritize plantings in areas at risk for urban heat impacts
 - Planted 360 street trees in 2023; plans to increase this number as budget allows
 - Annual fall tree giveaway established- in 2022, 65 “bare root” trees were given to residents
 - Establishing a young tree training program to help shape new trees and prepare them for a strong and healthy future
- NR 3.2: Utilize school gardens and community gardens as nature-based landscaping demonstration sites
 - ACR Garden Intern program, summer '23 and summer '24
- NR 3.3: Update current development regulations to require the use of appropriate native plants for new- and re-development and de-emphasize non-native lawn spaces
 - DCDP staff reviewing all regs/policies that need to be updated or augmented; creating a “green guide” for applicants
- NR 4.1: Expand and accelerate existing Green Stormwater Infrastructure (GSI) policies and management programs for public projects
 - Installed approx. 25 tree trenches in 2023

Natural Resources Updates

Watertown Microforest Project


- Relates to several plan actions- NR 1.2, 2.2, 2.3, 3.2, PH 2.2
- The City is collaborating with WPS, Trees for Watertown and resident advocates to create a demonstration “microforest” project at the Lowell School (corner of Orchard and George St)
- The Miyawaki method involves the dense planting of native tree and shrub species in a confined area of several thousand square feet, which makes the plantings mature at a faster rate
- In addition to air quality, heat island, stormwater, and local ecosystem benefits, microforests are a powerful engagement and education tool
 - Volunteers will be involved in site prep and planting
 - Opportunities for citizen science activities as forest grows and changes over time
 - School and camp curriculum integration
 - Informational signage
- Also considering pairing it with new community garden beds in coordination with WCG
- Anticipated project timeline: planting in Oct/Nov 2024



Cambridge Miyawaki forest

Infrastructure & Waste Updates



- IW 1.1: Create a bulk purchasing network for compostable and environmentally friendly goods among the commercial and industrial sectors
- IW 1.2: Design and implement an education and outreach campaign focused on reducing waste
- IW 1.3: Create convenient and free organics recycling program 
- IW 1.4: Establish an Environmentally Preferable Purchasing policy (EPP) that focuses on reducing consumption within municipal government
- IW 1.5: Investigate opportunities to pursue a circular economy in Watertown or within the Metro



IW 1.1: Create a bulk purchasing network for compostable and environmentally friendly goods among the commercial and industrial sectors

- In the brainstorming phase
 - One example would be to establish a preferred vendor program for compost collection for non-municipal organizations, to help them start composting and reducing their trash.
 - Schools would also benefit from this for their compostable trays.
 - City events should try and strive for “zero waste” status by having reusable or compostable items



IW 1.2: Design and implement an education and outreach campaign focused on reducing waste

- Looking to 2024, the Recycling Department has created a strategic plan that will take Watertown to 2030.
 - Focus on reuse and reduction
- Outreach and Education has been a focus the past two years
 - Annual recycling mailer and additional mailers to be sent to all residents 2024
 - Recycle Coordinator “office hours” at the farmer’s markets—potential for more of these in other location
 - Billboard campaign to promote compost program in summer 2023
 - New recycle tote informational stickers to be added to all totes in 2024
- Trash and Recycling Ordinance to be brought forward to council this year
 - Create and pass regulations and ordinances that align with our sustainability goals and move Watertown in the right direction
 - Include mandatory recycling
 - Phased in approached to support residents (in city program and in apartments) who want the opportunity to compost
 - The ordinance will have a phased in approach to ensure the city and residents are ready for any and all changes.



IW 1.3: Create convenient and free organics recycling program

- Free curbside composting program in partnership with Black Earth launched Aug '22 and *currently serves 2,700 households. Goal to reach 3,000 by end of FY24*
- Composting is happening in all school kitchens (back of house)
- Hosmer and Cunniff have robust school cafeteria programs that incorporate 5th graders teaching lower grades. Lowell will begin this month—they have already started education in classrooms.
- Goal to increase drop-off locations to multiple locations around Watertown
 - Pilot drop off program for pumpkins at the DPW—was a success
- Will have free soil give away events this spring—promotional tool as well
- Creating an outreach campaign that will include testimonials from residents as a way to bring in new residents to the program.
- Have not had anybody who is not moving out of the city, un-enroll in the program!



IW 1.4: Establish an Environmentally Preferable Purchasing policy (EPP) that focuses on reducing consumption within municipal government

- In the brainstorming phase
 - Watertown currently has a “Buy Recycled” policy, but it is outdated and could use an update.
 - Ideally focus on reusable materials, rather than single use.



IW 1.5: Investigate opportunities to pursue a circular economy in Watertown or within the Metro Boston region


- Cardboard compactor is being added to the recycle center
 - *This will open up space for a small-scale swap shop to be created and implemented.*
- Swap shops models are all around Massachusetts, and they help to keep useful and working items out of the trash or even give them a second or third life before we recycle them.
 - Many of the materials that end up in the hard plastic or e-waste container could be repurposed, and this will be a great way to increase local reuse and promote community-mindedness.
- Re-Supply is an organization that collects bulk items and works with habitat for Humanity to repurpose materials as a first option, before disposal.
 - Information is on our website, and residents are encouraged to try this option
 - Looking to formalize a partnership in the future
- Look into establishing re-usable takeout container program. Reduces waste and promotes local restaurants.

Infrastructure & Waste Updates



- IW 2.1: Require all major new and upgraded infrastructure to incorporate resilient design guidelines
- IW 2.2: Review and enhance current infrastructure maintenance systems and protocols to align with the needs of a changing climate
- IW 2.3: Advocate with partners for the safe removal of the Watertown Dam
 - CRWA tabled at Faire on the Square 2023 to highlight dam removal efforts
 - Watertown staff participated in CRWA site walk with DCR and other state agencies, Fall '23
- IW 2.4: Investigate local back-up power, microgrid, and battery options in coordination with utilities
 - Battery storage installed at Hosmer Elementary School

Public Health & Community Preparedness Updates

- PH 2.1: Complete and climate change and health vulnerability assessment
 - Staff submitting a technical assistance proposal to MAPC. To identify populations most vulnerable to health impacts of CC, identify barriers or gaps in resources, and recommend policy or procedures to address those barriers/gaps.
- PH 2.2: Mitigate existing and prevent new urban heat islands in Watertown
 - Forestry Division is focusing new tree plantings in hotter neighborhoods
- PH 2.3: Continue to enhance access to local food for those who are food insecure
 - ARPA funds awarded for a food equity coordinator and additional money for farmers market, food pantry, and community fridge
- PH 3.4: Enhance emergency preparedness information on City website 
 - IT Department making website upgrades and changes to citizen notification system
 - New 311 communication system and 311 Administrator position
- PH 4.2: Enhance the existing Live Well Watertown coalition and its programs to incorporate neighborhood connections to nature and to each other
 - Working to expand block party model piloted with Riverside Neighborhood Group



Next Steps

- Launch EV charging infrastructure study
- Planning and design for microforest project
- Introduce BERDO and tree ordinance legislation to Council
- Continue and expand RW education and outreach efforts
 - Grow newsletter audience
 - Plan City-led or partnership events for Earth Day
 - Identify additional entities to partner with for messaging and events