

Recycling & Community Service Coordinator and Sustainability Intern Updates

Manchester Public Works Department

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Introductions



Rachel Schnabel, PE
Recycling & Community Service Coordinator

B.S. Environmental Engineering from Rensselaer Polytechnic Institute
10+ years of experience consulting in the civil-environmental field



Emily Bigl, Sustainability Intern
Recent UConn Graduate Environmental Studies & GIS
Manchester Sustainable CT Fellow 2022

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Sustainability Intern Updates

Emily Bigl

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Sustainable CT Climate Leader Designation

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Overview

- Manchester's Past Certifications: Bronze 2019, Silver 2022
- Why go for the Climate Leader Designation?
 - *CLD celebrates municipalities that are reducing harmful greenhouse gas emissions and preparing their communities for the impacts of climate change, while saving money, improving public health, and building community.*
- Gold Certification next year



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Sustainable Town Actions in our Application

- Implement Complete Streets Projects
- Host Electric Vehicle Charging Stations
- Convert Municipally and Utility Owned Street Lights to LED
- Benchmark and Track Energy Use in Municipal & BOE Buildings



Main St RRFB



Adams St Bike Lane



Buckley EV Charger

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Town Website Additions and Revamps

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Integrated Pest Management (IPM)



IPM is a sustainable, preventative approach to managing pests in agriculture and other settings with limited reliance on chemical treatments.

- ▶ Definitions/Overview
- ▶ Manchester's IPM Approach
- ▶ Residential IPM Resources
- ▶ Municipal IPM Resources
- ▶ Invasive Species Resources
- ▶ Take Action! Section
- ▶ FAQ


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In This Section

- Town Leadership
- Town Manager's Office
- Submit a Request
- Get Involved
- Stay in the Loop
- Work for Manchester
- Pay Online
- Investor Relations
- Business & Planning Permits and Licenses
- Departments
- Accounting

Integrated Pest Management




What is Integrated Pest Management?

Integrated Pest Management (IPM) is a sustainable, preventative approach to managing pests in agriculture and other settings with limited reliance on chemical treatments. It focuses on combining various strategies to control pests while minimizing their impact on human health and the environment. IPM incorporates techniques such as biological control, cultural practices, use of resistant crop varieties, and targeted application of pesticides only when necessary.

What is a Pest?

A pest is any living thing - a plant, animal, or microorganism - that has a negative effect on humans, the natural environment, and/or established ecosystems. Examples include harmful and unwanted plants, insects, rodents, fish, or even fungi.

- Assessment Office
- Board of Directors
- Budget and Research Office
- C.E.R.T. - Community Emergency Response Team
- Collector of Revenue
- Communications and Civic Engagement Office
- Customer Service & Information Center
- Finance Department
- Emergency Management
- Fire Department
- Fire Marshal's Office
- Human Resources



Manchester's IPM Approach

The Town of Manchester has staff that have been trained and hold a commercial supervisory certificate in pesticide application from the State of CT. Following state guidelines, the Town utilizes applications throughout the year to address pests and invasives. Each year staff attend training and seminars regarding new information for pests, invasives and treatments as well as updates for safety training and procedures.

Residential IPM Resources

Homeowners can implement their own IPM programs or request that their service providers use IPM when performing pest management within their home or landscape. The key to successful pest management for homeowners is good communication and a commitment to change conditions that make it easier for pests to flourish. Generally, it is not necessary for a home IPM program to be complex in order to be successful.

- [Integrated Pest Management for the Home](#)
- [Homeowner IPM Structural Checklist](#)
- [Ant Management](#)
- [Rodent Management](#)
- [Cockroach Management](#)

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- Human Services
- Leisure, Family, and Recreation Department
- Library
- Planning and Economic Development Department
- Police Department
- Public Works Department
- Frequently Asked Questions
- Manchester Dashboard
- Pothole Reporting
- Leaf Collection Program
- Sanitation Division
- Engineering & GIS
- Report a Problem

Municipal IPM Resources

In municipal, commercial and campus settings, development of a written IPM plan to establish individual responsibilities, pest action thresholds, a system of communication and pesticide hierarchy is recommended and, in some cases, required by law.


- [General Guidance](#)
- [Sample IPM Plans](#)
- [Sample Bird Specifications](#)
- [Self-Help Evaluations](#)
- [List of 25\(b\) Pesticide Products Registered in Connecticut](#)
- [Public Act No. 03-136 An Act Concerning Invasive Plants](#)

Invasive Species Resources


- [Invasive Plants in Your Backyard! A Guide to Their Identification and Control](#)
- [Connecticut Invasive Plant Working Group](#)
- [Connecticut Invasive Plant List](#)
- [Guidelines for Disposal of Terrestrial Invasive Plants](#)
- [National Invasive Species Information Center](#)

Take Action!

If you are interested in signing up to be notified of invasive pull-parties and educational workshops, contact Rachel Schnabel at rschnabel@manchestertc.gov.



- Sanitation Division
- Engineering & GIS
- Report a Problem
- Residential Collection
- Public Works Documents
- Building Inspection Division
- Facilities Division
- Banner Requests
- Leaf Collection FAQ
- Purchasing
- The Registrars of Voters
- Senior, Adult, and Family Services
- Town Attorney



Frequently Asked Questions

- What are pesticides? +
- Are there alternative methods used to manage pests? +
- How is risk managed when using chemicals for pest removal? +
- How can I dispose of pesticides and other similar chemicals? +
- How can I help prevent pests in my garden in the first place? +

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Low Impact Development (LID)



The goal of LID is to mimic natural hydrologic conditions by using techniques that infiltrate, filter, store, and evaporate stormwater runoff close to its source.

- Overview
- LID Initiatives in Manchester
- Helping at Home
- Commercial and Municipal Resources
- FAQ

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- Assessment Office

Low Impact Development

What is Low Impact Development?


Low Impact Development (LID) is an ecologically based stormwater and land use management approach which favors management of rainfall on site through a mostly vegetated treatment network. The goal of LID is to mimic natural hydrologic conditions by using techniques that infiltrate, filter, store, and evaporate stormwater runoff close to its source.



LID Initiatives in Manchester


- Biofiltration area in Buckley Elementary School parking lot
- Detention basin on Spencer Street
- Bioswale at Manchester Country Club
- Retention basin in New State Road Park
- Planned bioretention basin in Town Hall parking lot
- Planned rain garden on Oak Grove Street

- Budget and Research Office
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- Communications and Civic Engagement Office
- Customer Service & Information Center
- Finance Department
- Emergency Management
- Fire Department
- Fire Marshal's Office
- Human Resources
- Health Department
- Human Services
- Leisure, Family, and Recreation Department

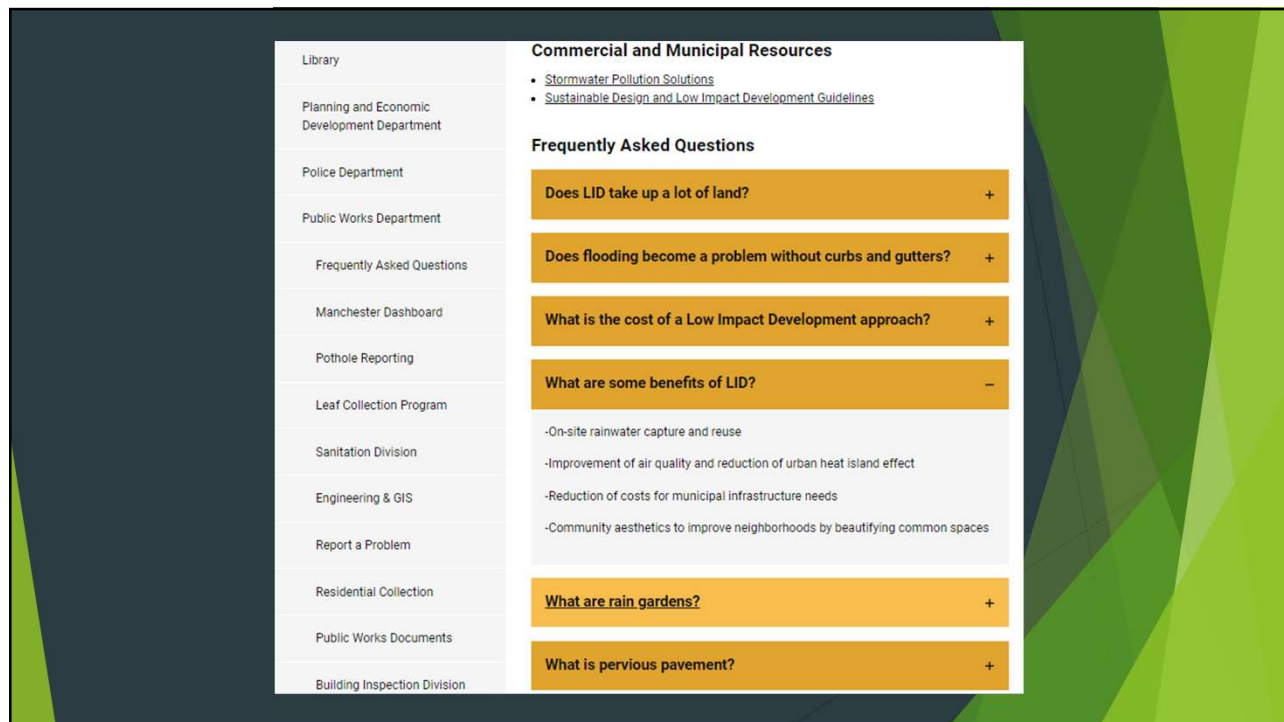


Helping at Home

- [Residential Best Management Practices](#)
- [Resident Guide to Rain Barrels](#)
- [How to Build a Rain Barrel](#)
- [Resident Guide to Vegetated Riparian Areas](#)
- [Resident Guide to Pervious Pavement](#)
- [Resident Guide to Rain Gardens](#)



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Sustainable Manchester




- ▶ Home page
 - Overview
 - Town Awards + Achievements
 - Sustainability Commission
- ▶ Town Actions
 - Energy, Housing, Environmental Conservation, Transportation, Waste, Water
- ▶ Resident Resources
 - Energy, Housing, Environmental Conservation, Transportation, Waste, Water
- ▶ Business Resources
 - Energy, Purchasing, Environmental Conservation, Transportation, Waste, Water

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Sustainable Manchester


Overview

The Town of Manchester strives for sustainability through active climate change mitigation, emphasizing equity, and fostering resilience. Our goal is to weave sustainable prosperity into every facet of our town by promoting the three pillars of sustainability: environmental, social, and economic well-being. We are dedicated to creating a greener, more equitable, and prosperous community. Join us in building a sustainable and vibrant future for Manchester, where people and the planet thrive hand in hand.




Town Actions

Click here to explore various actions the Town of Manchester has taken to promote sustainability in our communities.



Resident Resources

Click here to learn more about various topics of sustainability and what you can do as a resident.





Business Resources

Click here to learn more about various topics of sustainability and what you can do as a business.

Town Awards and Achievements

In October 2022, the Town of Manchester was awarded the [Sustainable CT](#) Silver Certification for achieving a wide range of sustainability goals. The Town of Manchester was also awarded both the Bronze Designation and the Community Engagement Award in Solar Excellence in by [SolSmart](#) in 2022.

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Town Actions

- [Overview](#)
- [Energy](#)
- [Housing](#)
- [Environmental Conservation](#)
- [Transportation](#)
- [Waste](#)
- [Water](#)

Overview

Welcome to our Sustainable Town Actions page! Click through the topics of Energy, Housing, Environmental Conservation, Transportation, Waste, and Water to see what the Town has been doing to promote sustainability in Manchester.


Next >

Energy

Energy

The Town has accomplished the following to promote renewable energy and reduce energy consumption:

- Reduced energy consumption by 15% since 2013 in municipal and Board of Education buildings.
- Designed and constructed the State of Connecticut's first renovate-as-new Net Zero Energy school renovation project (Buckley Elementary School).
- Achieved Bronze status in the national SolSmart community designation program by using zoning codes to reduce barriers to solar implementation in town.
- Installed multiple Rectangular Rapid Flashing Beacons (RRFBs) powered by solar energy.
- Converted municipally-owned streetlights to energy-efficient LED bulbs.
- Installed solar panels on the water treatment plant, as well as on 6 school facilities (Waddell Elementary, Highland Park Elementary, Verplanck Elementary, Manchester Regional Academy, Martin Elementary, Manchester High School). Check out the photo gallery below!



Verplanck Elementary School
320.62 kW system installed in 2023 to produce 349,100 kWh of solar power annually.

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Resident Resources

- [Overview](#)
- [Energy](#)
- [Housing](#)
- [Environmental Conservation](#)
- [Transportation](#)
- [Waste](#)
- [Water](#)

Water

Practicing water conservation at home can reduce water scarcity risks, lower utility bills, and alleviate the strain on local water resources. Residential water conservation contributes to the collective effort to combat water shortages and the broader challenges of climate change.

- [Stormwater management](#): This link will redirect you to more educational information on the Town's website about stormwater management.
- [Water Saving Tips from the Manchester Water & Sewer Department](#): Follow this link to see tips on how to save water from the Town's Water & Sewer Department!




Click the image above to open a PDF about an annual rain barrel sale hosted every Spring!

Business Resources


- [Overview](#)
- [Energy](#)
- [Purchasing](#)
- [Environmental Conservation](#)
- [Transportation](#)
- [Waste](#)
- [Water](#)

Waste

Commercial businesses may want to consider sustainable waste management practices as they can reduce disposal costs and unlock potential revenue streams through recycling and waste-to-energy initiatives. Sustainable waste management also demonstrates a company's commitment to environmental stewardship.



Check out the link above for information on DEEP's Business Recycling Assistance.



Click the image above to open a PDF of the Center for Ecotechnology's (CET) information on business food waste reduction made easy!

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Recycling & Community Service Coordinator

Rachel Schnabel

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Miniature Spirit Bottle Surcharge Recap

- ▶ Per Public Act 21-58, the state has mandated a 5-cent surcharge on the sale of miniature spirit bottles.
- ▶ This is NOT a deposit.
 - ▶ Miniature spirit bottles are too small to be processed by a reverse vending machine.
 - ▶ These bottles are also not recyclable.
- ▶ The funds from the surcharge are distributed to the municipalities in which they were sold.



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Recycling Coordinator Position

- ▶ Under this act, the Town may use the funds for one or both of the following:
 1. "...reduce the generation of solid waste..."
 2. "...reduce the impact of litter caused by such solid waste..."
- ▶ The Town created the Recycling Coordinator position to carry out these two goals.
- ▶ I was hired for this position and started work in April 2023.



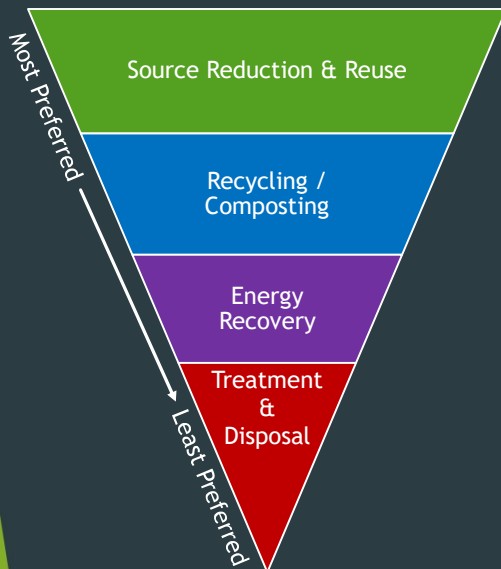
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Litter Reduction Initiatives

- ▶ Education Outreach
- ▶ Litter Mitigation
 - ▶ New Park Trash Receptacles
 - ▶ Illegal Dumping
- ▶ Litter Cleanups
- ▶ Litter Indexing

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Waste Reduction Initiatives

- ▶ Education Outreach
- ▶ Take It or Leave It Donation Program
- ▶ Extra Recycling Carts for Super-Recyclers
- ▶ Recycling Competition at Bennet Academy
- ▶ Food Waste Drop-Off Pilot

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Education Outreach

- ▶ Talk with 5th Graders at Bennet Academy
- ▶ Litter cleanup and analysis with the Illing Middle School Science Club
- ▶ Tabling Events
 - ▶ Spruce Street Farmer's Market
 - ▶ Juneteenth
 - ▶ Doggie Dunk at Globe Hollow
 - ▶ Gizmo's Retirement Party
 - ▶ Lights in the Sky



Plastic in Manchester

Courtney Lindberg
Deputy Public Works Director

Rachel Schnabel
Recycling & Community Service Coordinator



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Education Outreach

- ▶ New slogan of "Love Manchester, Live Green"
 - ▶ Stickers and button as giveaways
 - ▶ Draws people to my table at events
 - ▶ Promotes the type of community we want to grow
- ▶ Sanitation website updates are underway



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Litter Mitigation

- ▶ Illegal Dumping at the Meadow Brook Playground
 - ▶ Growing reports of illegal dumping next to trash and recycling carts
 - ▶ Asked hauler to keep trash and recycling carts close to playground
 - ▶ No illegal dumping reported since

Reports of Illegal Dumping 2021-2023

- 1 in Nov 2021
- 1 in Jun 2022
- 1 in Aug 2022
- 1 in Sep 2022
- 2 in Oct 2022
- 2 in May 2023
- 2 in Jun 2023



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Litter Mitigation

- ▶ Pilot of New Park Trash Receptacles
 - ▶ Litter is often found next to the trash carts in our parks
 - ▶ May be caused by fear of germs from touching the lid (heightened by the COVID-19 pandemic)
 - ▶ New trash carts with dome lids have been ordered
 - ▶ People will be able to throw away trash without touching the lid
 - ▶ No need to change our operations since these carts function the same as our current carts
 - ▶ There will be a collaboration with the schools to decorate these trash carts with student art



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Litter Cleanups

- ▶ Earth Day Cleanup - 2023
 - ▶ Annual event occurring in April
 - ▶ Collaborative effort at Center Springs Park:
 - ▶ Public Works
 - ▶ Manchester Land Trust
 - ▶ Sustainability Commission
 - ▶ Conservation Commission
 - ▶ Youth Commission
 - ▶ Bob's Discount Furniture cleaned up Union Pond Park



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Litter Cleanups

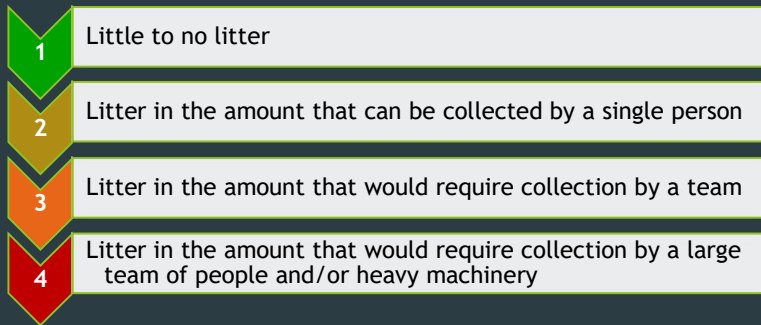
- ▶ Source to Sea Cleanup - 2023
 - ▶ First of what will be an annual event in September
 - ▶ Collaborative effort with the Connecticut River Conservancy for a cleanup at Center Springs Park
 - ▶ Fuss & O'Neill did their annual cleanup of Union Pond Park
 - ▶ Also collaborated with the CT River Conservancy
 - ▶ Vernon Subaru is scheduled to do a cleanup at Northwest Park
 - ▶ Was postponed to October due to rain
 - ▶ Is collaborating with Save the Sound



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Litter Indexing

- ▶ An assessment is being conducted of how littered all public streets in Manchester are, from a 1 to a 4.



- ▶ This data will be utilized to target future litter mitigation and cleanup efforts.

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Source Reduction & Reuse

- ▶ Take It or Leave It Donation Program
 - ▶ Partnership with Human Services Department
 - ▶ Residents will be able to donate used furniture (that's in good condition) at the Transfer Station
 - ▶ This furniture will be distributed to those in need, particularly those who are going from homeless to housed
 - ▶ Accepted items will include...
 - ▶ Lamps
 - ▶ Dressers
 - ▶ Bed frames
 - ▶ Tables (nothing too big)
 - ▶ Chairs (no upholstery)



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Recycling

- ▶ Extra Recycling Carts for Super-Recyclers
 - ▶ Sanitation Department currently provides a FREE second recycling cart (by request) to residents served
 - ▶ We are prepared to heavily promote this opportunity for the week of National Recycling Day (November 15th)
- ▶ Recycling Competition at Bennet Academy
 - ▶ We are supporting a recycling competition for the 5th Graders to get them excited about recycling (and inspire the parents)!



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Composting

- ▶ Starting a food waste drop-off pilot in November
- ▶ Interested residents will be able to sign-up
- ▶ Participants will receive a pail to collect and transport their food waste to one of four locations:
 - ▶ Whiton Library
 - ▶ Senior Center
 - ▶ Globe Hollow Parking Lot
 - ▶ Transfer Station
- ▶ Food waste collected will be transported to a facility where it will become compost
- ▶ Gas produced from composting will be captured for energy



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Composting

- ▶ There will be enclosures for the food waste carts at each location
 - ▶ Protects against vermin
 - ▶ Limits access and provides data
- ▶ Participants will be able to unlock the unit through use of an app
- ▶ The app will tell us who is using the units and at what frequency
- ▶ The data will be used to see who we're not reaching as well as popular areas of participation
- ▶ Residents who do not want to use an app will have the option of going into the transfer station to drop off their food waste



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Rachel Schnabel



Emily Bigl

Questions?

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