HENNEPIN COUNTY MINNESOTA



2023 Recycling Progress Report

Achieving a zero-waste future



Contents

| Introduction3 |
|---|
| Progress toward goals 4 |
| Zero-waste dashboard 5 |
| 2023 highlights and major accomplishments 6 |
| Mapping a zero waste future 7 |
| Solid Waste Management Plan9 |
| Achieving more through collaboration10 |
| Progress on implementing solid waste |
| management plan strategies12 |
| Focus on organics13 |
| Waste prevention and reuse16 |
| Engaging residents through |
| education and outreach20 |
| Serving residents where they are23 |
| Promoting drop-offs for hazardous |
| waste and additional recyclables 31 |
| Managing the trash that remains33 |

Cover image: An Apartment Recycling Champion shows off recycling and trash signs added to help educate residents and improve recycling.

Introduction

2023 was a significant year in examining the county's solid waste system.

In June, the county finalized an ambitious Zero Waste Plan with 62 actions to realize a zero-waste future.

In August, the Hennepin County Board of Commissioners sought additional information on the Hennepin Energy Recovery Center (HERC) and its role in the solid waste system that resulted in zero-waste legislative platform priorities, 12 prioritized zero-waste actions, and a zero-waste dashboard to track progress toward responsibly closing HERC.

The Recycling Progress Report provides an update on implementation of Hennepin County's 2018 Solid Waste Management Plan, progress toward waste diversion goals, and a summary of the 2023 results for the county's waste management programs. The county's solid waste management plan aligns with the state's waste hierarchy, emphasizing strategies on the upper end of the hierarchy.

Learn more about the plan at hennepin.us/solidwasteplanning.



Progress toward goals

Hennepin County has established a zero-waste goal of diverting 90% or more of waste from landfills or incinerators. Minnesota statute requires metro counties achieve a 75% recycling rate by 2030. Although we've made incremental progress, significant changes in waste management systems and individual behaviors will be needed to meet that goal.



About 1.3 million tons of solid waste, which includes recycling, organics, and trash, were generated in Hennepin County in 2023. This is a 2% increase from 2022, or about 30,000 tons more.

Of the total tons generated, 43% was managed as recycling and organics. The remaining 57% was managed as trash at a waste-to-energy facility or landfill.



Changes in waste management

The amount of waste diverted to recycling increased by 4% and the amount managed as organics recycling increased by 13% in 2023 compared to 2022. The amount of waste sent to waste-to-energy remained relatively unchanged, while the amount of waste landfilled decreased by 1%, about 5,000 tons less

Changes in waste management methods, 2022 to 2023

| Management method | 2022 (tons) | 2023 (tons) | Percent change |
|-----------------------|-------------|-------------|-------------------|
| Recycling | 357,101 | 372,182 | 4% |
| Organics | 168,311 | 190,057 | 13% |
| (includes yard waste) | | | |
| Waste-to-energy | 363,014 | 361,625 | 0% |
| Landfill | 386,110 | 380,911 | -1% |
| Total | 1,274,536 | 1,304,775 | 2% |

Zero-waste dashboard – 2023 results



Zero-waste dashboard metrics: 2022, 2023, and goal

| Metric | 2022 | 2023 | Goal |
|--|--------------|--------------|--------------|
| Recycling rate | 41% | 43% | 75% |
| Amount of food, paper, and other | About 50% | No study in | Less than |
| biogenic materials in the trash | | 2023 | 10% |
| Waste generated per capita (tons/person) | 0.99 | 1.01 | 0.78 |
| Landfill rates | 386,110 tons | 380,911 tons | Less than |
| | | | 386,110 tons |

2023 highlights and major accomplishments

At the end of each year, we reflect on highlights from our work to advance a zero-waste future, take climate action, and advance equity. Here are some of our highlights from the year:

Finalized the Zero Waste Plan: Developed a plan with 62 actions to advance a zero-waste future. The actions were developed with extensive public feedback from more than 1,800 participants.

Launched the Apartment Recycling Champions program: Recruited and supported 17 residents to become Apartment Recycling Champions. The champions worked for six months to educate and inspire their neighbors to reduce waste and recycle more. Champions reached people in about 1,500 units at a variety of multifamily properties in environmental justice areas.

Encouraged building material reuse and recycling: Hosted our first Salvage Crawl in which 101 people visited at least one of the 13 participating building material reuse retailers. Awarded building reuse grants to 25 projects totaling \$97,000 – the most ever for this program – and adopted an internal construction and demolition waste policy for Hennepin County owned and funded projects.

Motivated waste prevention actions: More than 2,100 people participated in the Plastic-Free Challenge or Stop Food Waste Challenge. Participants completed more than 17,000 actions, helping to avoid 10,400 plastic straws, cups, cutlery, and bottles and preventing 2,300 pounds of food waste.

Repaired household items: Hosted 14 Fix-It Clinics where 1,400 residents worked to troubleshoot and repair more than 1,600 items (82% of items brought in) with the help of handy volunteers. These efforts prevented nearly 10,000 pounds of waste.

Gave grants to improve recycling and prevent waste: Awarded 72 grants totaling over \$211,000 to businesses, nonprofit organizations, multifamily properties, schools.

Provided drop-offs for safe disposal and recycling: Served 135,700 households at drop-off facilities and collection events to ensure safe disposal and recycling of materials like appliances, batteries, cleaners, electronics, mercury-containing items, paints, pesticides, and more.









Mapping a zero waste future

Hennepin County finalized its Zero Waste Plan in 2023, concluding the 1.5 year long process that resulted in 62 actions to advance a zero-waste future. The actions were developed with extensive public feedback from more than 1,800 participants.

The proposed actions for the Zero Waste Plan are organized around four aims:



Create a materials management system that reduces racial disparities and advances equity



Expand the reach of county waste education, grants, and programs



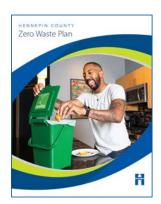
Adopt policies that accelerate the transition to a zero-waste future



Implement programs to advance circularity, reduce waste, and support reuse

The actions:

- Increase the recovery of recyclables and organics
- Address harder to recycle materials such as bulky items and construction debris
- Reduce consumption and increase circularity
- Bolster and expand end markets
- Encourage or incentivize behavior change
- Look upstream to reduce waste by influencing what is sold into the regional market



After finalizing the Zero Waste Plan, the Hennepin County Board of Commissioners directed staff to prepare a report on the Hennepin Energy Recovery Center (HERC) and its role in the solid waste system, develop a closure plan for HERC, and submit a plan for reinventing the solid waste system.

Timeline

- January 2023: County board briefing on the Zero Waste Plan
- February and March 2023: Public comment period, community meeting, and survey
- June 2023: Zero Waste Plan submitted to the county board
- September 2023: County board briefing on HERC and its role in the solid waste system
- October 2023: Hennepin County Board Action BAR-0384 R1
- November and December 2023: Gather feedback from cities
- January 2024: County board briefing on reinventing the solid waste system

HERC and its role in the solid waste system

A report was prepared for the county board to provide information and context related to decision-making for the 2024 Solid Waste Management Plan, the HERC, community concerns, and a provision in the state legislature's 2023 infrastructure bill that the county must submit a plan for the cessation of operations at HERC to access the \$26 million appropriated for the construction of an anaerobic digester.



HERC closure plan resolution

The board resolution passed on October 24, 2023, directed staff to develop a closure plan for the HERC between 2028 to 2040. The resolution included five key actions:

- 1. Propose legislative priorities and platform items by December 1, 2023
- 2. Engage city elected officials and gather input, with comments due January 15, 2024
- 3. Engage a consultant to assess viability of the county investing in renewable energy sources by February 1, 2024
- 4. Develop a HERC closure plan between 2028 and 2040 and submit to the board by February 1, 2024
- 5. Prepare contingency plans in the event of a sooner closure date

Reinventing the solid waste system

The Hennepin County Board of Commissioners heard a board briefing and discussion on January 25, 2024, on a plan to reinvent the county's solid waste system. This briefing responded to the resolution passed on October 24, 2023, to develop a closure plan for the HERC.

Hennepin County plans to aggressively pursue zerowaste policies, programming, and infrastructure and advocate for policy changes at the state level to move toward zero waste and make meaningful progress toward reducing climate emissions.

The briefing laid out the 12 highest priority zerowaste actions. These include:

 Passing an extended producer responsibility law at the state legislature to require producers of packaging to take responsibility for that packaging all the way from design to recycling or safe disposal.

- Securing adequate funding for zero-waste initiatives by using all revenue from the state's solid waste management tax on waste management activities.
- Banning recyclable materials, such as cardboard or mattresses, and organic materials like food scraps from landfills.
- Recovering recyclable and organic materials from the trash by developing a recycling recovery facility, which would use a variety of technologies to sort cardboard, metal, some plastics, and organics materials from the trash for reuse or recycling.

A zero-waste dashboard was introduced at the briefing to define the criteria to be met to responsibly close HERC and to identify 22 policies that need to be accomplished by the state legislature to realize this zero-waste future. The four metrics – recycling rate, percent of food and other biogenic materials in the trash, waste generated per capita, and landfill rates – will be tracked and reported on annually.

Solid Waste Management Plan

State statute requires metropolitan counties to prepare solid waste management plans every six years to meet the recycling goals and objectives in the state's Metropolitan Solid Waste Management Policy Plan. The MPCA finalized its new Policy Plan in January 2024.

The state policy plan includes a mix of required and optional strategies, with a total of 75 strategies. Each optional strategy is assigned a point value, and the county must implement enough optional strategies to reach a minimum of 75 points.

The Zero Waste Plan will serve as the foundation of the county's solid waste management plan, which will be considered for board approval in 2024.

Planning process overview

- June 2023: MPCA released the draft policy plan
- January 2024: MPCA released the final policy plan
- October 2024: Deadline to submit the county solid waste management plan to MPCA

Learn more about the process to develop the county's solid waste management plan at BeHeardHennepin.org/Solid-waste-plan.

Achieving more through collaboration

The Partnership on Waste and Energy (PWE) is a Joint Powers Agreement between the Ramsey/Washington Recycling & Energy Board and Hennepin County. In 2023, the chair was Hennepin County Commissioner Debbie Goettel.

The partnership collaborates in areas of waste and energy management, including legislation and policy development, communication and outreach, planning and evaluation of waste processing, and other selected programs.

Legislative work and highlights

Through its legislative advocacy efforts, the partnership seeks to end waste, promote renewable energy, and enhance the health and resiliency of its communities while advancing equity and responding to the challenges of a changing climate.

In the 2023 legislative session, partnership activities advanced the following areas:

- Redirecting Solid Waste Management Tax receipts from the General Fund into SCORE grants to counties
- Allocating funding to address the ongoing issue of emerald ash borer and wood waste management
- Laying the groundwork to adopt product stewardship policies for packaging
- Restoring funds borrowed from the Metropolitan Landfill Contingency Action Trust
- Securing consumers' right to repair electronic products
- Establishing consumer and waste industry protections from per- and polyfluoroalkyl substances (PFAS), a forever chemical
- Obtaining a position on the state's Clean Transportation Standard working group
- Supporting organics management through anaerobic digestion and compostable product standards and labeling requirements

Partnership board members, staff, and lobbyists engaged with policymakers on these and several other topics and continued to collaborate with partners toward common goals. In addition, the partnership provided written and verbal testimony and created policy position statements to communicate its interests.

Product stewardship

Product stewardship is a policy approach that holds producers responsible for managing their products and packaging for the materials' full life cycle to minimize the environmental and social impacts.

The partnership works with the Minnesota Solid Waste Administrators Association (SWAA) Product Stewardship Committee to advance a shared vision of product stewardship across the state.

This includes:

- Supporting efforts that reduce lifecycle impacts of products and packaging
- Reducing financial burdens associated with disposal on local government and taxpayers
- Establishing measurable and enforceable goals

In 2023, the partnership continued developing a bill to implement extended producer responsibility for packaging and paper products in Minnesota. This included developing draft bill language informed by 2022's committee process and stakeholder feedback.

The partnership also collaborates to advance policies related to other products, such as carpeting, mattresses, batteries and electronics.

Stop Food Waste Challenge

In August, Hennepin, Ramsey, and Washington counties joined together to expand Hennepin County's online Stop Food Waste Challenge to all residents of the three counties. Through the challenge, 36 partner organizations, such as farmers' markets, grocery stores, cities, corporate offices and neighborhood associations, were recruited to help increase promotion and engagement with residents.

The challenge had about 600 participants across 75 teams, completing over 4,800 actions to reduce waste. The impacts of these actions included reducing greenhouse gas emissions by almost 4,600 pounds, preventing 2,330 pounds of wasted food, and spending 1,760 minutes learning.



Progress on implementing solid waste management plan strategies

The Hennepin County Solid Waste Management Plan for 2018 to 2023 identifies strategies the county will pursue to reach the goals of recycling 75% of waste by 2030.

The plan includes the following strategies to help meet our goals of increasing recycling, preventing waste, and minimizing waste sent to landfills:

- Focus on organics recycling by establishing requirements for cities and certain businesses, increasing local capacity to manage organics, and working to prevent food waste.
- Build momentum for waste prevention and reuse by better understanding consumption habits and promoting waste prevention actions.
- Engage residents through outreach and education by raising awareness about changes in recycling programs, generating excitement about recycling and waste reduction, motivating environmental actions, and empowering residents to become leaders in their communities.
- Continue to serve residents where they are, including at home, work, school, and on-the-go.
- Provide and expand drop-off disposal options for hazardous waste, problem materials, and additional recyclables.
- Recover resources from the trash.

The following section includes updates on our progress implementing these strategies.



Focus on organics

Organic materials – which includes food, food-soiled paper, and other compostable materials – make up about 30% of our trash, so recycling them is key to achieving a 75% recycling rate and reducing the amount of waste we send to landfills. Diverting organics from the trash also helps address climate change by reducing emissions of greenhouse gases, especially methane, which is generated from the decomposition of organic materials in landfills.



The continued development of organics recycling infrastructure is needed to both ensure the viability of existing programs and support the development of new programs for residents and businesses.

- Worked with the county's preferred proposer - Sacyr Infrastructure USA - to complete value engineering aimed at achieving an adequate design with an acceptable cost.
- Reviewed preferred proposer's final proposal.
- Ended the procurement process for the a naerobic digestor project after receiving a final proposal that did not meet the county's acceptable price target.
- Began conducting a feasibility study of mixed waste processing as a first step toward evaluating additional options for minimizing landfilling and the disposal of organics.



Food waste prevention

About 40% of food is in the U.S. is wasted somewhere along the supply chain. Wasted food has both upstream and downstream impacts, from the energy used to grow, transport, process, and refrigerate it to the methane generated when food waste is landfilled. Because of these impacts, reducing wasted food is a surprisingly powerful climate solution. Wasted food also costs individuals and families a significant amount of money.

2023 results

- Hired a food waste prevention specialist to help establish a food waste reduction target for the county, lead the development and implementation of a county food waste prevention plan, work on food rescue, and coordinate public outreach and education initiatives outlined in the county's Zero Waste Plan.
- Supported food rescue by auditing the county's food rescue system to identify gaps and opportunities to support and expand the collection of surplus food and increase the system's responsiveness to community needs for nutritious food.
- Offered the Stop Food Waste Challenge in collaboration with Ramsey and Washington counties through the Partnership on Waste and Energy. Engaged 590 participants to complete 4,866 actions that together prevented about 2,330 pounds of wasted food and avoided about 4,500 pounds of carbon dioxide.
- Continued to educate residents on the importance of food waste prevention through the Zero Waste Challenge and Community Recycling Ambassador programs and connected volunteers to food rescue opportunities.

Advancing food rescue to serve those in need

Redistributing surplus food to those in need aligns with countywide priorities of acting boldly on climate change, transitioning to a zero-waste future, reducing disparities, and enhancing the health, safety, and quality of life for our residents.

Hennepin County conducted an audit of the county's food rescue system to understand gaps and identify effective strategies for the county's response. The report outlined key findings and recommendations, including:

- Expand on-the-ground support for donor organizations to improve food rescue efforts.
- Establish internal and external collaborations focused on continuous improvement of food rescue and county support.
- Train county health and waste inspectors to educate food establishments on food waste prevention and donation resources.

Using these findings, Hennepin County staff in multiple departments are collaborating on creative and innovative strategies to enhance food rescue efforts and community impacts.



Organics recycling requirements

The Hennepin County Board of Commissioners approved revisions to the county's recycling ordinance (Ordinance 13) in November 2018. These changes required businesses that generate large quantities of food waste to implement food waste recycling by 2020, and cities to provide residents access to curbside organics recycling service by 2022. Smaller cities can meet the requirement by providing an organics drop-off site.

- Conducted 88 inspections of businesses throughout Hennepin County for Ordinance 13 compliance and to provide education and resources.
- Worked with cities to develop organics recycling programs to comply with ordinance requirements. Curbside organics collection is offered in 27 cities through citywide contracts or by requiring haulers to offer the service, and organics recycling drop-offs are offered in 17 cities.



Waste prevention and reuse

Preventing waste in the first place is the highest impact step to take in managing waste and the top priority on the state's waste management hierarchy. Hennepin County offers several programs to encourage waste reduction and reuse. To reach its waste reduction goals, the county also targets specific materials that represent the largest percentage of reusable goods found in the trash, including food waste, wood, textiles, furniture, and household goods.

Choose to Reuse

Residents' buying choices and where they shop can protect the environment and support the local economy. Choose to Reuse aims to increase awareness of buying used goods and ultimately drive residents to purchase from their local reuse retailers.

- Published 14 articles on buying used and living a low-waste lifestyle. Content highlights included how to fix zippers, green parenting, what to do with old shoes, thrifting guide, low waste weddings, giving your food scraps new life, and tips for when it's time to empty the nest.
- Connected more than 120,650 users to the Choose to Reuse website, a 30% increase from 2022.
- Had almost 3.000 subscribers to the Choose to Reuse website emails. a 5% monthly increase over the last half of 2023.







Deconstruction and pre-demolition inspections

Construction and demolition projects can generate a lot of waste – but they don't have to. About 85 percent of the materials in a typical residential demolition project could be kept out of landfills, but currently only about 30 percent of building materials are reused or recycled.

Deconstruction, which involves carefully dismantling a building by hand and sorting materials into categories for efficient reuse and recycling, prevents usable materials from going to the landfill, makes used building materials available to the community, creates jobs, and supports local reuse retailers. Construction and demolition waste can also be minimized by incorporating used building materials into remodeling and construction projects.

- Awarded 24 building reuse grants totaling over \$95,000 for projects that reused and recycled materials in the removal or renovation of a building. These grants included:
 - 17 residential deconstruction projects
 - 6 used building material installation projects
 - 1 structural move project
- Diverted more than 297 tons of building materials from landfills, with 93 tons salvaged for reuse and 203 tons recycled, from the 17 projects completed in 2023 (7 projects will wrap up in 2024).
- Provided nearly \$142,000 to the nonprofit organizations Better
 Futures MN and Birch Group to fully deconstruct 6 buildings and
 partially deconstruct 25 buildings within the county, diverting over
 1,000 tons of material from the landfill, including 277 tons for reuse
 and 784 tons for recycling.
- Worked with cities to implement three city-run construction and demolition waste events, including two hosted by the City of Orono and one hosted by the City of Brooklyn Park.
- Adopted an internal construction and demolition waste policy to increase reuse and recycling of building materials on county-owned projects.
- Provided education and outreach on reusing and recycling building materials to residents, contractors, and other partners through 8 webinar and conference presentations.
- Continued pre-demolition inspections to ensure proper management of hazardous materials prior to demolition.
 - Conducted 92 pre-demolition inspections, including 22 in-person inspections and 70 document-only inspections, which are offered as an alternative to in-person visits.
 - Worked with 42 contractors to coordinate pre-demolition inspections and follow up.







Salvage Crawl draws visitors to building material reuse retailers

Hennepin County's debut Salvage Crawl in May 2023 encouraged residents to get to know building material reuse retailers in the Twin Cities. Sometimes referred to as home improvement thrift stores, salvage retailers offer a wide variety of building materials, hardware, tools, and other home improvement items.

Residents were encouraged to visit the 13 participating retailers, check in using the QR code on the Salvage Crawl poster in the store, and be entered into a drawing for prizes.

Throughout the month, 101 participants entered to win prizes. The Salvage Crawl brought out 87 first-time store visitors, and 26% of those first-timers made a purchase on their visit. Overall, 40% of the participants made purchases on their Salvage Crawl stops, ranging from cobblestone to cabinetry and lumber to tools and paint supplies.

One participant bought trim to match existing materials in an older home. Another was searching for vintage materials to be used during the remodeling of a bathroom in their Victorian house. Several participants planned to use salvaged lumber to build raised bed garden boxes.



Fix-It Clinics

Learning how to repair items is an effective way to produce less waste and conserve the resources that go into manufacturing, packaging, transporting and disposing of goods. Hennepin County Fix-It Clinics address common barriers to repair, including the fear of taking something apart and not being able to get it back together and the knowledge and skill to troubleshoot and fix an item, by providing free, hands-on assistance from knowledgeable volunteers.

2023 results

- Held 13 clinics with more than 1,400 participants and 113 volunteers contributing more than 2,500 hours.
- Achieved an 82% fix rate, with 1,669 out of 2,076 items successfully repaired.
- Kept 9,888 pounds of materials out of the waste stream.





Waste prevention at businesses



Businesses and organizations produce more than half of the waste in the county. Preventing waste conserves natural resources, reduces greenhouse gas emissions, can help a business' bottom line, and demonstrates commitment to the community.

Common areas of focus for businesses include prevention of food waste, reuse and recovery of goods and materials, and development and use of recovered products.

- Awarded 4 business waste prevention grants totaling about \$30,000 for the purchase of reusable food ware to replace single-use disposables. Recipients were:
 - Banyan Community in Minneapolis (\$5,715)
 - Hi Flora! in Minneapolis (\$5,000)
 - Minnesota Adult and Teen Challenge, Minneapolis location (\$5,000)
 - Mosaic in Minneapolis (\$14,350)
- Continued to support MNimize, a single-use plastic reduction pledge and certification program for food businesses run by Minnesota Waste Wise in partnership with the county. The program had 50 new participating business in 2023, which was significant growth from the 7 businesses participating by the end of the program's first year in 2022. MNimize awarded 12 rebates totaling \$5,400 to help businesses reduce single-use plastic. MNimize staff made 470 outreach contacts and 115 site visits. Changes made by participating businesses avoided the use of 204,500 single-use plastic items, estimated at more than 29,500 pounds of waste reduced annually.

Engaging residents through education and outreach

The everyday choices and behaviors of the county's 1.3 million residents, 43,000+ businesses, and all those who visit or work in Hennepin County impact the county's ability to reach its solid waste management goals. The impact of people choosing to use less, recycle more, and properly dispose of waste is reflected in the county's waste management data and results.

Hennepin County promotes environmental stewardship by raising awareness about changes in recycling programs, generating excitement about waste reduction, and partnering with organizations in the community to motivate behavior change.

Zero Waste Challenge programs



Many people are interested in taking steps to prevent waste, declutter, and recycle more, but aren't sure where to start. Zero Waste Challenge programs help participants live lower waste lifestyles by supporting them in exploring their waste and consumption habits, identifying the most effective actions for their household to take, reducing the amount of waste they generate, and motivating others to take action.

- Supported 30 households in completing the individualized six-month Zero Waste Challenge and reducing the amount of recycling and trash they produced.
 - Participating households achieved an average household diversion rate of 62% by the end of the challenge.
 - Five Community Recycling Ambassadors served as mentors for participating households.
 - Held an intro training and monthly workshops for participating households and had households track their waste multiple times over the course of the challenge.
- Ran the Plastic-Free Challenge in February, engaging 1,550 participants to complete over 13,940 actions.
 - Cumulative impacts of those actions included avoiding over 10,400 plastic straws, cups, utensils, and bottles and preventing over 5,300 pounds of carbon dioxide emissions.

- Gained the support of 40 partner organizations who helped help recruit and engage participants, and hosted two kickoff events and several other educational opportunities.
- Offered the Stop Food Waste Challenge in collaboration with Ramsey and Washington counties through the Partnership on Waste and Energy.
 - Rebranded and adjusted the challenge to share resources applicable to residents across the metro.
 - Collaborated with 36 partner organizations who expanded the reach by sharing with their audiences and organizing chef demonstrations at farmers markets and coops, and expanded the audience of the challenge to 590 participants.

Community Recycling Ambassadors

Personal connection paired with specific information and resources that address barriers is a powerful way to inspire action. Community Recycling Ambassadors help bridge the gap between awareness and action by motivating their friends, family, co-workers, and communities to reduce waste in their homes and workplaces.

Community Recycling Ambassadors are trained on waste prevention, recycling and composting, and effective communication skills through a six-week course taught by industry experts and community leaders. They then commit to volunteering 30 hours inspiring others in their communities to reduce waste, recycle more, and compost through activities such as answering questions at events and designing and implementing waste reduction and recycling projects.

- Held two class sessions one virtual, one hybrid with 49 volunteers completing the training (bringing the program total to 833).
- Supported volunteers in contributing 676 hours to recycling and waste reduction projects in their communities. Nearly 14,000 residents were contacted by or impacted by the work of Community Recycling Ambassadors, and Community Recycling Ambassadors helped out at events attended by nearly 35,000 residents.
- Held a continuing education event for active volunteers focused on organics recycling.
- Offered waste facility tours after a 3-year hiatus due to COVID-19. Coordinated 9 facility tours at Hennepin County's Brooklyn Park Transfer Station, Hennepin Energy Recovery Center, and the Shakopee Mdewakanton Sioux Composting (SMSC) site.



Environmental education, outreach, and communication efforts

Environmental education, outreach, and communication efforts engage our community and partners in developing the knowledge, skills, attitudes and motivation to work individually and collectively towards sustaining a healthy environment.

- Supported 54 projects through Green Partners environmental education grants program, which provides funding and support to organizations to actively educate, engage and motivate residents to become environmental stewards and make positive behavior changes. Launched a pilot youth green jobs grant program in addition to environmental action and youth environmental education grants. The grants awarded in 2023 will directly engage 9,500 people, reach more than 220,000 people with environmental messages, and employ more than 50 youth in green jobs exploration and training.
- Supported the environmental education network, which is open to anyone working to engage their community in learning about and taking action to protect the environment, by holding two virtual and two in-person meetings, sharing resources and opportunities through 12 editions of environmental education news, and building connections in the Facebook group.
- Gave 77 tours to nearly 800 people at the Hennepin Energy Recovery Center (HERC) and the Brooklyn Park Transfer Station and welcomed 780 visitors to HERC during Doors Open Minneapolis.
- Supported green jobs pathways programs to increase access to environmental careers to diverse job seekers. Coordinated the second cohort of the Green Pathways Internship Program, which provided job shadowing opportunities for three recent high school grads and one college coordinator. Continued the operator apprenticeship program at the Hennepin Energy Recovery Center with three diverse candidates participating in the training program.

- Shared messages through Hennepin Environment's Facebook, Instagram, and X/Twitter that have a total of 14,500 followers. The 910 posts shared throughout the year received more than 5,400 reactions and generated 5,600 link clicks.
- Sent 143 digital newsletter editions to over 47,000 total subscribers covering topics such as recycling, waste prevention, zero-waste initiatives, hazardous waste disposal, and grant programs.
- Promoted the Green Disposal Guide, an online guide to help residents find information on the best way to recycle, reuse, or dispose of household items. The guide was visited by about 246,000 unique visitors.
- Promoted waste prevention, recycling, and proper disposal by providing tips and resources on a variety of topics.
- Fulfilled over 550 orders for more than 44,000 items for recycling and environmental education resources for residents, businesses, schools, and multifamily properties.



Serving residents where they are

At home

Recycling, organics, and trash service depends on where you live. Cities provide recycling service to most houses and smaller multifamily buildings (those with two to eight units). This service is commonly referred to as single-family curbside recycling. Larger, multi-unit residential buildings have waste services provided by the property owner or manager.

City recycling programs

Cities play an important role in the solid waste management system by making recycling easy and convenient for residents.

Hennepin County provides funding to support city recycling programs and assists with educational efforts and contracting. The county also participates on regional and statewide teams to improve consistency in recycling programs and education.



- Distributed \$3.7 million in SCORE funding to support curbside recycling and organics programs, organics drop-off sites, and multifamily recycling. To receive a grant, cities were required to meet the terms of the county's residential recycling funding policy. Cities collected nearly 110,000 tons of recyclable materials from 374,179 households in 2023.
- Supported city recycling coordinators though quarterly meetings, sharing resources, and providing assistance and information.
- Assisted cities with promotional efforts and sending recycling guides to residents to increase consistent use of terminology and recycling messages.
- Continued to participate in the Recycling Education Committee, a statewide group formed by the MPCA to support the development of better recycling education and outreach. Participated in meetings with representatives from the recycling industry, local government, and other organizations to build consensus on what is universally accepted, coordinate consistent messaging to the public, and improve communication.
- Provided technical assistance to cities on recycling RFPs and contracts. City recycling contracts allow cities to communicate consistent educational messages, provide a variety of resources, and deliver the best overall price for service.

Multifamily recycling

Per Hennepin County's recycling ordinance, property owners and associations are required to provide adequate recycling service and ensure residents have annual recycling information and easy access to recycle. The county offers resources to improve recycling at multifamily properties, including grants, educational materials, container labels, and staff assistance.

- Allocated \$244,000 of SCORE funding to support multifamily recycling and waste reduction efforts. Distributed multifamily funding to eight cities -Brooklyn Park, Bloomington, Edina, Golden Valley, Maple Plain, Minneapolis, Richfield, and St. Louis Park – that opted in to support efforts such as:
 - Creating educational materials
 - Collecting data on multifamily properties
 - Conducting outreach through mailers, newsletters, and social media
 - Conducting site visits and providing technical assistance to properties
 - Opening organics drop-off sites specifically for apartment residents
- Provided technical support to improve waste reduction, recycling, and organics recycling at 329 properties with more than 34,000 units. Served 133 new properties and provided follow-up assistance to 196 properties.
- Awarded \$45,000 in funding to multifamily properties to start or improve recycling or organics recycling efforts
 - Distributed free recycling and organics recycling bins and compostable bags to 21 multifamily properties through the bin and compostable bag grants.
 - Awarded 11 multifamily recycling grants, which helped six properties with organics hauling start-up costs, three properties with bulky item and mattress recycling hauling, and two properties with building waste enclosures to expanding collection services.

- Sent a bi-monthly multifamily recycling newsletter to more than 2,100 subscribers, featuring topics such as helping residents recycle more, reducing waste when moving, and finding a nearby organics recycling drop off.
- Continued in-person programming at multifamily properties, including 36 presentations and trainings on food waste prevention, recycling, and organics recycling.
- Continued a two-year partnership with Minnesota Waste Wise to provide additional outreach and technical assistance to multifamily properties.
- Launched the Apartment Recycling Champions, a new recycling initiative that pays residents at multifamily buildings to become champions and help educate their neighbors about recycling and motivate them to reduce waste. Recruited and trained 17 residents of multifamily properties who reached people in about 1,500 units at 15 multifamily properties in environmental justice areas throughout the county.





Celebrating a successful first year for Apartment Recycling Champions

Hennepin County launched the pilot Apartment Recycling Champion program in 2023. Through the program, 17 residents at multifamily properties were hired for six months to distribute education materials, monitor trash and recycling areas for contamination, respond to resident questions on recycling, set up recycling bins in their building's common areas, and educate and inspire their neighbors to reduce waste and recycle more.

Champions reached people in about 1,500 units at 15 multifamily properties in areas of concern for environmental justice. Champions served as a trusted resource, communicating with their neighbors in culturally relevant ways. Overall, champions were proud of the work they completed and saw the impact in their building.

"This program really opened my eyes to the need of recycling within my community. I love being educated, and this program was packed with knowledge of how I can make a difference in my community," shared one of the champions.

Continuing the Apartment Recycling Champions program in 2024 is a priority for implementing the county's Zero Waste Plan goal of improving access to and participation in recycling and organics recycling at multifamily buildings.





City organics recycling programs

The county and cities are focused on offering more organics recycling opportunities and increasing participation in organics recycling programs. Cities offer different ways to participate in organics recycling, including through citywide programs, through specific haulers, and with drop-offs.

Organics recycling availability, participation, and amount collected have been gradually increasing over the last decade. All cities in the county were required to make organics recycling service available to households with curbside recycling service by 2022.

2023 results

- Distributed \$3.7 million in SCORE funds to support curbside recycling and organics recycling programs, organics drop-off sites, and multifamily recycling.
- Assisted cities with promotional efforts and sending recycling and organics recycling guides to residents. Cities used county terminology and images and provided messages through a variety of channels including direct mail, newsletters, websites, social media, and events.
- Awarded the City of Edina a \$12,000 organics recycling drop-off grant to expand their organics drop-off sites to 5 locations.



Residential organics

tons collected



96,7/25

households participating in city organics recycling programs

people using organics recycling drop-off sites

of households in the county participate in an organics recycling program

Cities with curbside organics recycling service

- Bloomington
- Brooklyn Center
- Brooklyn Park
- Champlin
- Corcoran
- Crystal
- Eden Prairie
- Edina
- Excelsior
- Golden Valley
- Hopkins
- Long Lake
- Loretto
- Maple Grove
- Maple Plain

- Medicine Lake
- Medina
- Minneapolis
- Minnetonka
- New Hope
- Osseo
- Plymouth
- Richfield
- Robbinsdale
- Rockford
- Rogers
- St. Bonifacius
- St. Louis Park
- Tonka Bay
- Wayzata



Cities with organics recycling drop-offs

- Bloomington
- Brooklyn Center
- Crystal
- Dayton
- Deephaven
- Edina
- Greenfield
- Greenwood
- Hanover
- Hopkins
- Independence
- Minneapolis
- Minnetonka

- Minnetonka Beach
- Minnetrista
- Mound
- New Hope
- Orono
- Plymouth
- Richfield
- St. Anthony Village
- St. Louis Park
- Shorewood
- Spring Park
- Woodland



Backyard composting

Composting at home is a great way to turn fruit and vegetable scraps, coffee grounds, leaves, and grass clippings into a nutrientrich compost that can be used to improve soil and help plants grow. To increase backyard composting, the county sells compost bins at a discounted rate at the drop-off facilities and offers workshops to help residents learn how to compost.

2023 results

- Held four online and two in-person backyard composting workshop, providing education to 110 residents.
- Sold 87 compost bins at the drop-off facilities in Bloomington and Brooklyn Park.

At work

The commercial sector generates more than half of the total waste in Hennepin County, and nearly two-thirds of the waste created at businesses and nonprofits is recyclable. A strong recycling program conserves natural resources, reduces greenhouse gas emissions, can help a business' bottom line, and demonstrates the organization's commitment to sustainability and the community.

2023 results

- Distributed free recycling bins to 23 businesses and organizations to start or improve recycling or organics recycling. Bin and compostable bag grants are intended for smaller businesses (less than \$1 million annual revenue) and nonprofit organizations.
- Awarded \$30,000 in business waste prevention grants to four businesses. Waste prevention grants are available to all businesses and nonprofit organizations.
- Visited over 175 businesses to offer in-person assistance, education, and promotion of waste prevention and recycling.



2023 business bin and bag grant recipients

- Altburger (Minneapolis)
- Brookdale Covenant Church (Brooklyn Center)
- Butter Bakery (Minneapolis)
- Cream and Amber (Hopkins)
- Danish American Center (Minneapolis)
- Elk Marketing Council (Rogers)
- Greater Twin Cities United Way (Minneapolis)
- Groveland Confections (Minnetonka)
- Hi Flora! (Minneapolis)
- Machine Shop (Minneapolis)
- Holy Nativity Christian Childcare (New Hope)
- Joyce Uptown Food Shelf (Minneapolis)
- Knight Cap Bar & Lounge (Minneapolis)
- The Luminare (Minneapolis)
- Lutunji's Palate (Minneapolis)
- Marty's Deli (Minneapolis)
- Mosaic Venue (Minneapolis)
- Multi-Cultural Care (Minneapolis)
- Neighborhood Roots Kingfield Farmer's Market (Minneapolis)
- Norwegian Lutheran Memorial Church (Minneapolis)
- Project for Pride in Living (Minneapolis)
- Ricardo Levins Morales Art Studio (Minneapolis)
- Wayzata Community Church (Wayzata)

At school

Nearly 80% of school waste is recyclable or compostable. Schools are required by state statute to have a recycling program. More than half of the K-12 schools in Hennepin County voluntarily divert additional waste from the trash by having an organics recycling program.

Providing youth with the opportunity to recycle and compost at school helps encourage future generations to be environmental stewards. To help schools reduce waste and increase diversion to recycling and organics programs, the county provides grants and technical assistance, distributes educational resources and signage, presents to students and staff, and offers school-wide assemblies through a partnership with Twin Cities Road Crew.

2023 results

- Awarded school recycling grants to five schools to expand recycling, reduce waste, and compost on-site.
- Updated the school recycling grant guidelines to expand eligibility to preschools, colleges and universities for the 2024 round of grants.
- Partnered with Twin Cities Road Crew to bring educational performances on recycling and waste reduction to over 8,100 elementary students at 27 schools. Received positive feedback from school staff, including that 96% would definitely recommend the program to another school and 94% felt that the students learned new behaviors that will help the environment.
- Gave eight presentations on waste reduction, recycling, and organics recycling to 120 students and 70 staff.
- Delivered 110 cubic yards of free compost in partnership with the Shakopee Mdewakanton Sioux Community compost site to 32 schools to close the loop on organics recycling.



2023 school recycling grantees

El Colegio (Minneapolis)

\$10,500 to provide recycling bins for classrooms and offices throughout the school as well as outdoor recycling bins.

Northeast College Prep (Minneapolis)

\$14,800 for reusable trays and utensils to reduce waste from single-use items.

Notre Ecole (Golden Valley)

\$2,000 to set up a sharing table, start collecting recycling in the cafeteria, and start composting on-site.

Osseo Area Schools (Independent School District 279)

\$1,400 to expand recycling to the cafeteria and collect food scraps in the kitchen to compost on-site.

Watershed High School (Richfield)

\$1,300 to start a food donation program and compost on-site.

At Hennepin County workplaces

Hennepin County knows that we must lead by example when it comes to waste management. Several county departments oversee different aspects of the county's internal waste management program.

- Environment and Energy coordinates in-house recycling programs. This includes working with Facility Services to ensure a robust recycling program in county offices and facilities, educating staff, and managing an in-house media recycling program for all county departments.
- Central Services handles the recycling of toner cartridges from county departments, and Purchasing maintains office supply listservs to facilitate the reuse of office supplies and furniture within county departments.
- Information Technology properly handles the recycling of non-usable and obsolete electronic equipment.

A new organics recycling bin alongside recycling and trash bins at the Hennepin County Government Center.

2023 results

- Responded to guestions and concerns from staff on how to best manage waste and materials generated at county offices and facilities.
- Helped Facility Services remove usable building materials and supplies from the 625 Building left behind by the previous tenant.
- Began the process of reinstating organics recycling in the courts section of the Hennepin County Government Center, working with staff from the courts and Facility Services to ensure a smooth relaunch of the program.

At events and on the go

The county partners with the cities of Brooklyn Park and Hopkins to make portable recycling and organics containers available for events throughout the county.

2023 results

• Distributed containers for use at 32 events with approximately 80,310 attendees.

Promoting drop-offs for hazardous waste and additional recyclables

Drop-off facilities and events

Many items that aren't accepted in residential recycling programs can still be recycled through drop-offs. There are also items that contain hazardous materials that must be kept out of the trash because they can harm our health or the environment.

To ensure proper disposal of hazardous items, the county operates permanent drop-off facilities in Bloomington and Brooklyn Park for residents to bring appliances, electronics, excess recycling, and household hazardous wastes.

In addition to disposal services for residents, the county's Brooklyn Park Transfer Station and Hennepin Energy Recovery Center are vital facilities in keeping the solid waste system operational.

- Served almost 141,000 residents and collected over 7.3 million pounds of household hazardous waste, problem materials, and recycling at county drop-off facilities and collection events.
- Held four household hazardous waste collection events. The four events, each held over two days, had more than 2,500 residents dropping off 132,500 pounds of waste, or 53 pounds per participant.
- Collected over 507 tons of cardboard, 540 tons of appliances, 675 tons of electronics and 332 tons of scrap metal at the drop-off facilities.
- Fielded more than 19,180 calls from residents. Call center staff spent more than 525 hours responding to resident guestions, a 4% increase over 2022.



Mattress recycling

More than 90% of the materials in a mattress, including the cotton, foam, steel springs, and wood, can be recycled. Mattresses are collected for recycling at the Hennepin County drop-off facility in Brooklyn Park, and pickup service is available through Second Chance Recycling. Second Chance is a Minneapolisbased nonprofit run by EMERGE that provides transitional employment opportunities for people with barriers to employment.

2023 results

- Collected 6,269 mattresses and box springs from residents at the Brooklyn Park Transfer Station.
- Picked up 1,552 mattresses and box springs from apartments, condos, and single-family homes.

Medicine

Proper disposal of unused and unwanted medicines is important for protecting water and wildlife and preventing misuse and addiction. To facilitate the safe disposal of unwanted medicine, Hennepin County operates and promotes medicine drop boxes available throughout the county.

2023 results

- Promoted medicine disposal options at 65 medicine drop boxes – 22 of the boxes are operated in partnership with the county and 43 are operated by independent pharmacies.
- Properly disposed of nearly 15,580 pounds of medicine at drop boxes operated in partnership with the county.



Paint

Paint is one of the most common materials brought to the Hennepin County drop-off facilities or collection events for recycling.

- Collected over 1.2 million pounds of paint at county drop-off facilities and events.
- Promoted availability of paint disposal at 39 independent sites that partner with PaintCare, including hardware stores and paint stores. These independent sites collected 704,624 pounds of paint.
- Received \$548,400 from PaintCare for costs related to paint disposal.



Managing the trash that remains

Waste-to-energy

Despite the focus on diverting materials from the trash through waste reduction, reuse, recycling, and organics recycling, residents and businesses put over 742,000 tons of stuff in the trash in 2023. This is nearly 1,150 pounds per person. State statute requires counties to manage waste according to the state's waste management hierarchy, which prioritizes waste processing and waste-to-energy methods over landfilling.

Hennepin County owns and operates the Hennepin Energy Recovery Center (HERC), a waste-to-energy facility in downtown Minneapolis. In January 2024, the county developed a plan to reinvent the county's solid waste system to accelerate closure and repurposing of the HERC. This plan establishes a zero-waste dashboard to define the criteria to be met to responsibly close HERC and identifies 22 policies that need to be adopted by the Minnesota State Legislature to realize this zero-waste future.

Until the county achieves its zero-waste goals and state-mandated recycling rates, operating HERC keeps the county in compliance with state statutes, makes progress toward climate action goals, generates revenue for natural resources programming, keeps trash bills stable for residents and businesses, and provides more than 350 high-wage jobs.

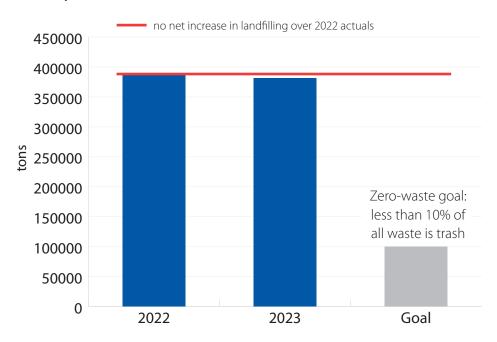
- Met state law to process trash before landfilling with over 351,000 tons of trash delivered to HFRC.
- Recovered 16,942 tons of metal for recycling.
- Offset the use of fossil fuels for electricity for 25,000 homes and natural gas to heat 1,500 homes.
- Cleaned and treated air emissions at HERC to remain well below MPCA permitted levels.



Landfills

Disposing of trash in landfills is the least preferred way to manage waste. To track progress toward zero-waste and reduce the burden of county trash on communities outside of the county, the zero-waste dashboard includes a goal of no net increase in landfilling rates over 2022 actuals. Ultimately, achieving the county's goal of zero waste would mean that 90% or more of all discarded materials are diverted from landfills or incinerators and less than 10% of all waste generated needs to be disposed of as trash.

Municipal solid waste in landfills



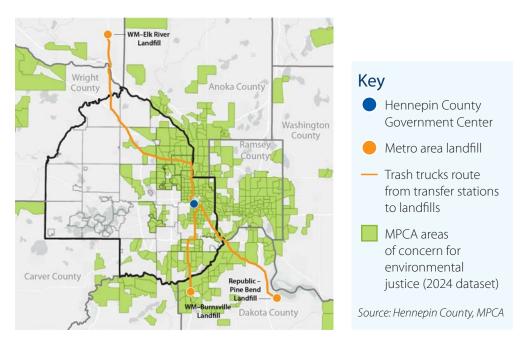
Municipal solid waste landfilled in Minnesota in 2023

| Landfill | Owner | Tons |
|---------------------------------|------------------|---------|
| Elk River | Waste Management | 155,103 |
| Pine Bend (Inver Grove Heights) | Republic | 116,018 |
| Burnsville | Waste Management | 53,265 |
| Spruce Ridge (Glencoe) | Waste Management | 9,753 |
| Nobles County (Rushmore) | Nobles County | 358 |

Municipal solid waste landfilled out-of-state in 2023

| Landfill | Owner | Tons |
|--|-------------------|--------|
| 7-Mile Creek (Eau Claire, Wisconsin) | GFL Environmental | 25,882 |
| Central Disposal (Lake Mills, Iowa) | Waste Management | 11,513 |
| Lake Area Landfill (Sarona, Wisconsin) | Republic | 8,001 |

Location of metro landfills in relation to areas of concern for environmental justice



Legacy impacts of landfilling



According to the MPCA, landfills must be managed forever to prevent groundwater contamination, and decomposing waste will continue to release greenhouse gases. Further, trash in landfills can overheat, causing underground fires, and continue to compact, creating unstable ground that cannot be used for future development.

Landfill impacts on groundwater and surface water are associated with leachate. The primary concern is the

potential for PFAS and other emerging chemicals of concern to be discharged into surface water with the treated wastewater.

PFAS in landfills can migrate into the leachate, which is often treated at a wastewater treatment facility. Few existing removal systems installed at landfills or wastewater treatment plants are capable of removing PFAS, creating the potential for PFAS to be discharged into surface water with the treated wastewater.

In 1994, the Landfill Cleanup Act created Minnesota's Closed Landfill Program so the state could effectively protect human health, safety, and the environment associated with landfills throughout Minnesota. The program manages the risks to human health and the environment associated with contaminated groundwater and surface water emanating from the waste area, landfill gas migrating from the waste that could threaten nearby structures as well as be released to the atmosphere as a greenhouse gases, and chemical vapors release into structures.

The Closed Landfill Program is responsible for the permanent, long-term care of the program landfills, including three in Hennepin County in Eden Prairie, Hopkins, and Medina. The program's current contractual obligations over the next 30 years are anticipated to be \$309 million. An increase in future obligations is anticipated to evaluate alternative technologies to address landfill greenhouse gases and remove PFAS and other emerging chemicals of concern from the groundwater at several closed landfills.

