RECYCLINGWORKS IN MASSACHUSETTS & THE GREEN TEAM FISCAL YEAR 2023 OVERVIEW





TECHNICAL ASSISTANCE FOR BUSINESSES & INSTITUTIONS





RecyclingWorks MA is funded by MassDEP, delivered under contract by the Center for EcoTechnology







Fiscal Year 2023 Overview

Waste Diversion as a Result of FY23 Hotline, Mini TA, and TA Activities*

Type of Diversion	Annual Tonnage Diverted	Percentage of Total Diversion
Recycled	727 tons	51%
Reused	64 tons	4%
Reduced	9.3 tons	0.7%
Food Donated	57 tons	4%
Organics Diverted**	573 tons	40%
Total	1,431 tons	100%

1,431 tons diverted FY23, contributing to 324,000 tons since 2013
232 businesses received technical assistance
Over 110,600 website visits



Outreach and Program Awareness

7,516 Monthly newsletters subscribers

16 Blog posts

16 Events reaching over 1,117 people

1,298 Followers on Facebook & Twitter

Chambers of Commerce, Industry Associations, Business Organizations



888.254.5525 | recyclingworksma.com | info@recyclingworksma.com

Seeking participants for reusable takeout container stakeholder meetings!

On behalf of the Massachusetts Department of Environmental Protection (MassDEP) and the Massachusetts Department of Public Health (DPH), RecyclingWorks is coordinating a series of meetings that will inform the development of guidance on how restaurants, colleges and universities, and other food service entities can transition away from single-use foodware containers to reusable containers.

Waste Ban Awareness & Environmental Justice Communities

CAMBIOS EN LA PROHIBICIÓN DE ELIMINACIÓN DE RESIDUOS DE MASSDEP

Efectivo el 1 de Noviembre de 2022

MassDEP va añadir **textiles y colchones** a la lista de materiales prohibidos. Lasempresas y instituciones de Massachusetts que generan media **tonelada dealimentos o más por semana** también estarán sujetas a la prohibición deeliminación de desperdicios de alimentos.



Contacta RecyclingWorks en Massachusetts para recibir ayuda para comenzar: recyclingworksma.com | (888) 254-5525 | info@recyclingworksma.com

Maneras Fácil y Económico para Cumplir

- Reduce el <u>desperdicio de alimentos</u> a través de técnicas de prevención, donación de excedentes comestibles y separación de desechos para compostaje, digestión anaerobia o alimentación animal
- Reutilizar <u>textiles</u>, donar a organizaciones de reutilización o asociarse conrecicladores de textiles
- Recicle <u>colchones</u> con poco uso o donelos a traves de programas locales, nacionales e internacionales







- Organics Waste Disposal Ban Restaurant Resources in English and Spanish.
- Engaging industry associations and organizations that serve minorityowned businesses.
- Targeted outreach with Spanishlanguage marketing postcards sent to Latin restaurants in Worcester.
- Program flyer and signage translations

Updated Website Resources

For Property Managers

Collecting Mattresses and Textiles for Reuse and Recycling

On November 1 2022, the MassDEP added textiles and mattresses to the list of materials that are banned from disposal. Most textile material, including apparel, linens, and other fabrics, and mattress components, such as wood, scrap metal, and foam can be recovered for reuse, repurposing, or recycling. Contact RecyclingWorks for a customized list of reuse organizations, recyclers, and haulers in your area.

Textiles – It is important to collect and recover textiles separately, as they do not belong in recycling containers of any kind and can cause equipment damage and worker safety challenges at recycling facilities. For residential properties, consider facilitating monthly or seasonal donation collection pick-ups with a **local organization**. Some commercial tenants, such as clothing retailers, may also generate textiles. If your property includes multiple businesses that generate textiles, consider siting one or more collection containers for shared use.

Mattresses (including foundations or box springs) – There is a growing infrastructure for recycling in Massachusetts, and many **mattress recyclers offer pick-up services**. Conside closed or covered container, particularly if there is a season when your property has a largumber of move-outs. Many Massachusetts municipalities offer **mattress recycling prog** including drop-off options that residents of multifamily properties can access. These prog typically do not provide pick-up options for private multifamily properties.

recyclingworksma.com/how-to/business-sectorguidance/property-managers/

C&D Materials Guidance

This guidance is intended to provide guidelines for contractors, architects, and property owners interested in increasing C&D reuse and recycling. The scope of this guidance covers a range of types of projects and project scales. It covers deconstruction, demolition and renovation projects, the reuse of building materials and donation of usable materials, on-site source separation of C&D material, and mixed C&D recycling.



Massachusetts Waste Bans

In 1990, the Massachusetts Department of Environmental Protection (MassDEP) introduced its first bans on landfilling and combustion of easy-to-recycle and toxic materials. Additional "waste bans"

een phased in over time. The following materials and items, which may be encountered in uction, demolition, or renovation projects, are prohibited from disposal and/or transfer for all in Massachusetts:

Food Waste Estimation Guide

What is Commercial Organic Material as defined by the waste ban?

Food Material
cludes but is not limited to: fruits, vegetables,
grains, fish, and animal products and

Vegetative Material
Plant material

Leaf and yard waste is covered under a separate existing wast ban. **General Conversions**

1 ton = 2,000 lbs

Commercial-industrial waste 1 yd³ (cubic yard) = 250 to 300 lbs

Food scraps
55 gallons = 200 to 450 lbs

Based on EPA's standard volume-to-weight conversions.

halt pavement, brick & concrete (ABC)

rous & non-ferrous metal

ated & untreated wood & wood waste (banned from landfills only)

an gypsum wallboard

yclable paper, cardboard & paperboard

ite goods (large appliances)

recyclingworksma.com/construction-demolition-materials-guidance/

recyclingworksma.com/food-waste-estimation-guide/

New Business Spotlights



Olivia 🗋 November 28, 2022

The dining halls and eateries at colleges and universities are ripe with waste prevention opportunity.

Transitioning away from single-use takeout containers is one way institutions can significantly reduce their waste and carbon footprints.

This year, Mount Holyoke College swapped out its single-use food containers and cups for returnables. The college accomplished this by partnering with USEFULL, a company that customizes durable stainless steel foodservice containers that are made to be used, returned, washed, and reused.



In an average year, Mount Holyoke was using around 250,800 compostable containers.

Their switch to returnable packaging is projected to prevent 5,488 pounds of singleuse material from entering the waste stream

Here is the impact of Mount Holyoke's transition to USEFULL containers since they implemented the program in February 2022:



Cassie Rogers 🗀 April 24, 2023

The "Williamstown Composts!" pilot program in Williamstown, launched for residents in 2018, has now expanded to include businesses. This local effort is supported in part by Community Climate Fund (CCF), which is administered by the Center for EcoTechnology (CET) and receives funding from Williams College. In the expanded pilot program, approved businesses receive funding to cover six months of pickup service for composting their organics and compostable packaging.

RecyclingWorks in Massachusetts (RecyclingWorks), funded by Massachusetts Department of Environmental Protection and administered by CET, partnered with "Williamstown Composts!" to conduct site visits to assist businesses with the implementation of their new food scraps collection program. RecyclingWorks offered free technical assistance to businesses to improve or expand their efforts in prevention, donation, and recycling of food waste. So far, several businesses have joined the pilot and are moving forward with organics collection for composting.







Olivia 🖺 August 10, 2023

A green demolition project at **Simmons University** in Boston recovered over a dozen tons (24,000 pounds) of material including furniture, fixtures, and glassware items.

This massive reuse undertaking emerged from the remodeling of the University's Park Science Center.



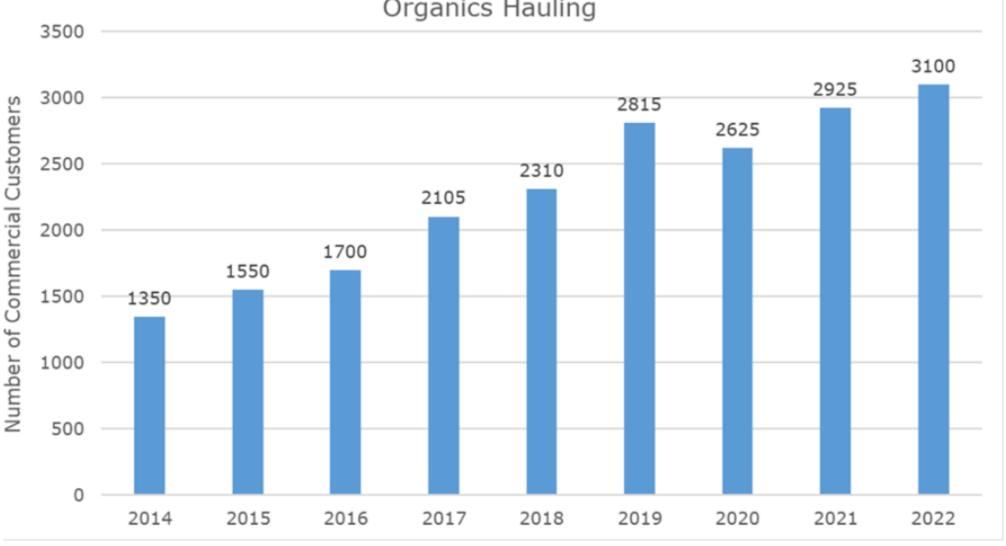
Advanced planning is key to the success of material reuse and deconstruction projects. The timeline that The Reuse Team has followed so far is shown below. This timeline can serve as a model for other institutions and businesses planning for similar projects.

The project entailed one year's worth of planning and coordination among Simmons University staff, Elkus Manfredi Architects (and their dedicated team of staff volunteers), the City of Boston, Skanska, The Carbon Leadership Forum of Boston – Reuse Group, and RecyclingWorks in Massachusetts (RecyclingWorks), making up "The Reuse Team".



recyclingworksma.com/blog/

MA Businesses and Institutions Contracting for Organics Hauling



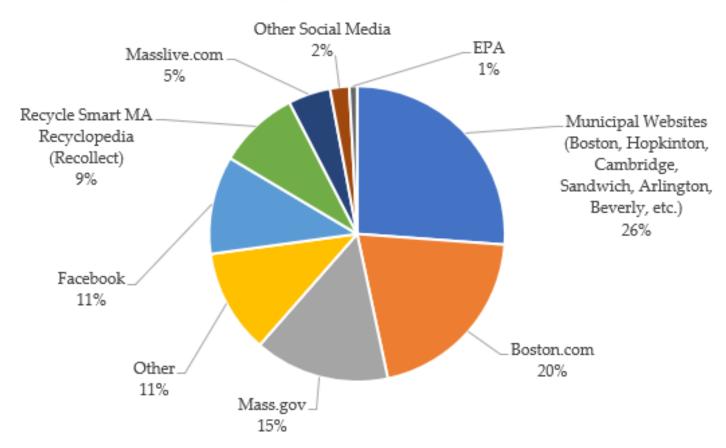


	Was .				
	Date	Total MA	New Annual	Total Annual Food	Companies
3		Commercial	Food Waste	Waste Prevented	Reflected in
	Reported	Customers	Prevented	(Cumulative Since 2018)	Data
	2018 (all time)	145 customers	1,025	1,025	3
	2019 (1 year)	154 customers	448	1,473	3
	2020 (1 year)	296 customers	169	1,642	4
	2021 (1 year)	447 customers	437	2,079	5
	2022 (1 Year)	576 customers	640	2,719	5
90	Total Food Waste Prevented (All Time):			8,938 tons to date	
		WEST STORY	V		

Referral Traffic to the RecyclingWorks Website

(12,937 referrals*)

Referal Traffic to the RecyclingWorks Website (12,937 referals*)



^{*}Excludes web traffic from search engines, direct searches, and spam referral sites.

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Ecos Properties & Worleybeds Case Study



Written Case Study

Ecos Properties - Reuse and Recycling During a Hospitality Renovation

Worleybeds – Mattress Recycling Program with HandUp

recyclingworksma.com/ecos-properties-worleybeds-case-study/







Mattress & Textile Recycling Spotlight
Ecos Properties, Lee, MA

Worleybeds, New Bedford, MA

Many businesses encounter unwanted textiles and mattresses in their operations. For example, hotels change their mattresses every three to five years and replace linens even more frequently. In 2020, MassDEP estimated that more than 230,000 tons of textiles and 16,000 tons of mattresses and box springs were disposed of in Massachusetts. In response, MassDEP expanded its waste disposal ban regulations in November 2022 to include these materials. Most textile material, including apparel, linens, and other fabrics, and mattress components, such as wood, scrap metal, and foam can be recovered for reuse, repurposing, or recycling. Read on to learn how two businesses are keeping these valuable materials out of our disposal facilities.



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RecyclingWorks in Massachusetts is a recycling assistance program funded by the Massachusetts Department of Environmental Protection and delivered under contract by the Center for EcoTechnology that helps businesses and institutions reduce waste and maximize recycling, reuse, and food recovery opportunities





Written and Video Case Study

600-700 lbs. food scraps per week collected for composting

Educational Signage

New - Reusable takeout containers

recyclingworksma.com/johnnys-luncheonette recyclingworksma.com/johnnys-luncheonette-reusables-program/

Compost Site Technical Assistance



Practical Skills Workshop

For Commercial Compost

Site Operators held on

May 15, 2023 with 28 attendees

Assisted 4 Sites

Composting food materials
Site layout and design
Operational best management practices
Pest and odor management

2022 RecyclingWorks Fall Forum

Held Virtually on Nov 9, 2022 with 112 attendees

Featured Speakers and Partnerships

Worleybeds Factory Outlet / HandUp

Needham Community Council Thrift Store / Helpsy

Bently University / SwagCycle

SMART

recyclingworksma.com/recyclingworks-in-ma-fall-2022-forum-recap/

FY23 RecyclingWorks MA Annual Report

RecyclingWorks in Massachusetts

Year End Report: Fiscal Year 2023 (July 2022 - June 2023)

The Center for EcoTechnology (CET) is proud to submit the FY23 year-end report for RecyclingWorks in Massachusetts (RecyclingWorks) to the Massachusetts Department of Environmental Protection (MassDEP). CET and MassDEP continued to provide waste diversion assistance to the commercial and institutional sectors through a robust suite of services. The following represents approximated measurable impacts this fiscal year:

- Approximately 1,430 tons of material diverted from disposal, contributing to an overall cumulative direct program impact of nearly 324,000 tons of material diverted since 2013
- 533 units of fluorescent lamps recycled
- · 1,784 total phone and email hotline inquiries
- In-person or virtual technical assistance (TA) provided to 232 businesses
- Compost site TAs provided to 4 operations
- Over 110,600 visits to <u>www.recyclingworksma.com</u>
- 16 speaking engagements/events, reaching 1,117 attendees

Key objectives identified for FY23 included spreading information and guidance surrounding the November 1, 2022 waste ban changes. Additionally, a focus was placed on advancing principles and initiatives of Diversity, Equity, and Inclusion (DEI), with a particular emphasis on engaging businesses in Environmental Justice (EJ) communities and minority owned businesses in Massachusetts. Here are a few highlights of CET's activities that support these priority areas:

New Waste Ban Materials - Textiles & Mattresses

- Hosted the RecyclingWorks Fall 2022 Virtual Forum in November 2022 with speakers highlighting successful implementation of textile and mattress recycling initiatives.
- Adapted an existing flyer about the commercial food waste disposal ban to include information
 about textiles and mattresses, available in both <u>English</u> and <u>Spanish</u>.
- Delivered a presentation about textiles diversion and technical assistance services during an hourlong session at the Annual Northeast Laundry Association (NELA) Conference, in Framingham.
- Developed a <u>written case study</u> featuring Ecos Properties and Worleybeds, two businesses with textile and mattress recycling programs.
- Added updated waste disposal ban information and best practices for recovering textiles and mattresses to the Property Manager sector webpage.

Commercial Food Waste Diversion

- Completed a <u>written and video case study</u>, initiated in FY22, featuring Johnny's Luncheonette, a
 medium-sized restaurant in Newton which now diverts 600-700 pounds of food material per week
 for composting.
- Delivered a presentation that focused on resources and services to support compliance with the MassDEP organics disposal waste ban.



recyclingworksma.com/about-recyclingworks/

Reusable Food Serviceware Best Management Practices

Project Overview and Goals

- MassDEP and MassDPH initiative
- For use by local health officials and food service businesses
- Enable increased use of reusable service ware
- Priority in MassDEP's Solid Waste Master Plan & Reduce & Reuse Action Plan



Fall-Winter 2023:

October 12 – Stakeholder Engagement Meeting #1

December 7 – Stakeholder Engagement Meeting #2

Spring-Summer 2024:

Draft guidance, receive feedback, edits, and post to RecyclingWorks website









Visit our Video Gallery! Visit our Photo Gallery!

When we all reduce, reuse and recycle as much as we can, there's very little left to throw away!

2022-2023 School Year Overview

280 Participating Green Teams

269 Teachers

60,096 Participating Students

30 Schools Received Recycling Equipment

16 Schools Received Idle Reduction Materials

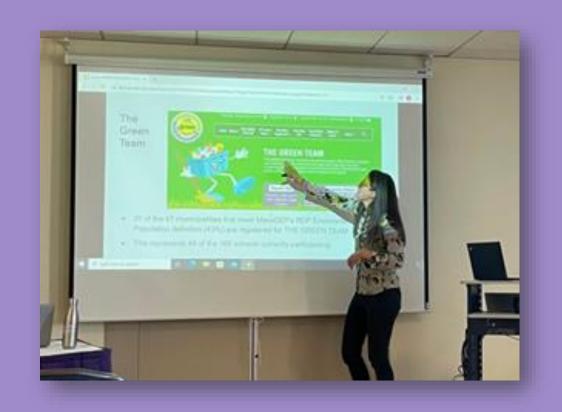






Outreach and Events

- Monthly Newsletter: 2,268 subscribers
- MA Principals & Superintendents
- MassDEP Green SWoRD (School Waste Reduction & Diversion) Working Group
- Conferences and Events:
 - MA Environmental Education Society (MEES)
 - MA Facilities Administrators Association and MA Association of School Business Officials (MFAA-MASBO)
 - MassRecycle
 - Springfield Farm to School Summit





New Guidance and Case Study

Reusable, Compostable, and Disposable CAFETERIA TRAY OPTIONS



This resource is intended to provide information to schools interested in single-use disposable tray alternatives. Included are benefits and considerations for three different lunch tray options, as well as best practices for commercial dishwashers.

Please <u>visit the corresponding webpage</u> for expanded information, additional success stories, and cost savings analyses.



New Bedford School District Case Study:

Reusables & Food Waste Reduction

Comprised of 19 elementary schools, three middle schools, and one high school servicing over 12,500 students, New Bedford supports the needs of a diverse and expansive student community. One of the largest districts in the Commonwealth, New Bedford Public School District is focused on positive change and sustainability. In this wonderfully diverse community, nearly 20% of New Bedford residents were born outside of the United States and over 37% speak a language other than English in their home. Students at New Bedford Public Schools speak English, Portuguese, Spanish, Haitian Creole, Cape Verdean, and K'iche, among other languages. This vibrant and diverse community is a local hub of industry and innovation. Of the 100,000 residents that call New Bedford home, 80% live in environmental justice neighborhoods.



recycle@thegreenteam.org | June 2023 | www.thegreenteam.org

New and Translated Idle Reduction Materials



thegreenteam.org/idle-reduction



thegreenteam.org/the-green-team-kit/

Schools shared their Green Team stories at the end of the year and received prizes such as bookmarks with plantable seeds, reusable straws, compost activity books, etc.

Grand prize winners received gift certificates from local pizza shops or a garden center.

"Wow, thank you! ... This award is such a great way to end my time with you!"

- Bruce McBrien, Amesbury Elementary School, Green Team Grand Prize Winner 2022-2023

2022-2023 Green Team Grand Prize Winners							
School Name	Community	Teacher	Grade	Green Team Prize	Member Since		
Amesbury Elementary School	Amesbury	Bruce McBrien	K-5	Grand Prize - Pizza Party	2004-2005		
East Elementary School	Hingham	Callie Shanahan	PreK-5	Grand Prize - Pizza Party	2009-2010		
HEC Academy	Northampton	Amy Stamm	9-12	Grand Prize - Pizza Party	2017-2018		

FY23 Green Team Annual Report

The Green Team Program 2022-2023 Final Report

August 2023

The Center for EcoTechnology (CET) continued to administer the MassDEP Green Team program in the 2022-2023 school year with 280 participating teams from 246 schools across Massachusetts. Program participation increased by 28% compared to the 2021-2022 school year (221 teams), and more than 70% compared to 2020-2021 (165 teams). CET worked on several special projects, including a written case study of New Bedford Public Schools' district-wide waste reduction and recycling efforts, a new Green Team webpage hosting a list of Environmental Justice resources, and updated Green Team Idle Reduction Pledges now available in 6 languages, for students to share with their guardians.

Participation Summary

The following table details the Green Team program participation during 2022-2023 and trends during the previous five years.

	2022-2023	Change from Previous Year	2021- 2022	2020- 2021	2019- 2020	2018- 2019	2017- 2018
Participating Green Teams	280	27% Increase	221	165	411	382	317
Participating Schools	246	22% Increase	201	150	348	346	287
Participating Students	60,096	45% Increase	41,320	26,378	113,921	88,166	56,538
TRFs Submitted	49	81% Increase	27	19	44	72	59
TRF Submission Rate	18%	50% Increase	12%	12%	11%	19%	19%



thegreenteam.org/whats-new

THANK YOU

THE GREEN TEAM recycle@thegreenteam.org (413) 586-7350 x225

www.thegreenteam.org

RecyclingWorks in Massachusetts info@recyclingworksma.com (888) 254-5525

www.recyclingworksma.com



