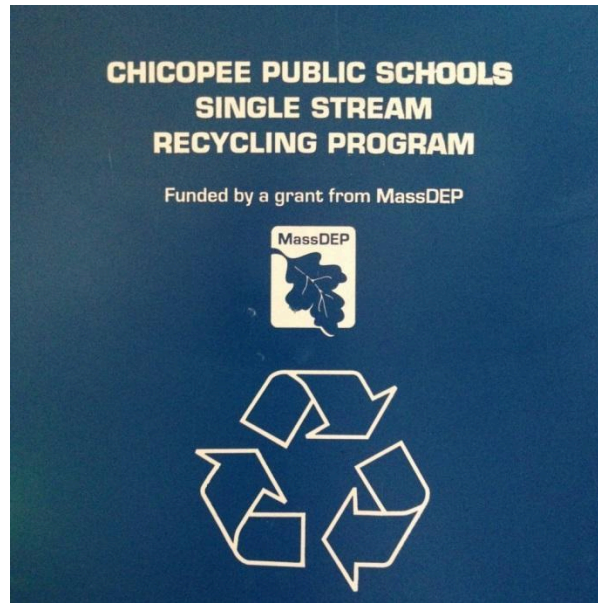


MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT



FINAL REPORT JUNE 2015

**Ken Parsons
kparsons@chicopeeps.org
413-265-5367**

All Chicopee Public Schools recycle materials that would otherwise become waste, including paper, cardboard, bottles and cans, throughout the school buildings and grounds in support of the Massachusetts Department of Environmental Protection's waste ban. Success of our recycling program is based on the cooperation of all individuals in our school community.

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

R	Recycling	✓
E	Educating	✓
C	Classroom Activities	✓
Y	YouTube Recycling Videos	✓
C	Carts and Baskets	✓
L	Lesson Plans and list of resources	✓
I	Importance of Recycling	✓
N	Newsletter Information	✓
G	Green Clubs	✓

Accomplishments

New for year three include, Bingo for Books, 41 quart containers and a recycling club at Chicopee Comprehensive High School. These are included in this final report along with all of the activities, books and equipment we continue to utilize across the school district.

RECYCLING activities to promote awareness and list of resources
RECYCLING bins, carts and baskets distributed throughout the district
RECYCLING books for elementary school Bingo for Books
RECYCLING books for elementary school libraries with lesson plans
RECYCLING increased and dumps reduced by 1,268.5 or \$57,627.74 over three years
RECYCLING posters and stickers used throughout the district
RECYCLING four R's - Reduce, Reuse, Recycle, Rethink
RECYCLING Single Stream throughout the district
RECYCLING statement published online and school newsletters
RECYCLING videolab kits in middle schools

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015



Major Goals

Goals	Status
Ensure compliance with Recyclable Materials Policy adopted by the Chicopee School Committee by raising awareness and providing educational materials	Ongoing
Provide ongoing support to all schools to establish a culture of wise material use and effective recycling in all schools in the system	Ongoing
Reduce waste by expanding recycling program	Ongoing
Track monitor and report recycling and waste disposal amounts	Ongoing

Deliverables

Deliverables	Status
Inventory of schools recycling equipment and signage	Complete
Report summarizing recycling and waste disposal amounts by school	Complete
Report summarizing the efforts, challenges and accomplishments	Complete
Summary of recycling information for school newsletters and websites	Complete

Tasks/Milestones

Tasks/Milestones	Status
Document, track and report recycling amounts	Complete
Ensure recycling dumpsters are full when picked up	Complete
Inspect school buildings to ensure recycling equipment/signage in place	Complete
Monitor recyclable program to ensure compliance	Complete

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Provide recycling information for school newsletters and websites	Complete
Provide recycling policy and lesson plans to all staff	Complete
Reduce trash dumpster pickup frequency	Complete
Remind teachers the importance of recycling	Complete
Work with school community to educate the importance of recycling	Complete
Work with Summer programs to ensure recycling policy is being followed, provide documentation, lesson plans and assistance	Complete

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Grant

RECYCLING GRANT	
Description	Amount
Recycling Grant	\$ 25,900.00
Blue Baskets (200) & Carts (63)	\$ (6,154.30)
Quart Baskets (41)	\$ (1,452.00)
Posters & Stickers	\$ (728.25)
Wristbands	\$ (1,980.00)
Recycling Books	\$ (216.80)
Videolabs	\$ (390.00)
Recycling Books for Bingo for Books	\$ (1,403.60)
Recycling Books for Bingo for Books	\$ (76.56)
Salary Year 1	\$ (2,337.60)
Salary Year 2	\$ (5,395.12)
Salary Year 3	\$ (5,765.77)
Remaining Balance	\$ 0

*Maintenance contributed \$2,520 towards cost of wristbands

Dumps Saved

- Total program dumps saved (based on a school year calendar)

YEAR	DUMPS SAVED	SAVINGS
1	344	\$13,208.74
2	387	\$16,370.53
3	537.5	\$28,048.47
Three Year Savings	1,268.5	\$57,627.74

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Dumps Saved (continued)

School	Dump	From	To	Saved	Weeks	D Saved	\$ Per Dump	Total Saved	
Admin	Trash	1	0.5	0.5	43	21.5	\$ 37.33	\$ 802.60	1 x wk to EOW
Admin	Recycle	1	0.5	0.5	43	21.5	\$ 44.55	\$ 957.83	1 x wk to EOW
Barry	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	
Barry	Recycle	1	1	0					
Belcher	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	
Belcher	Recycle	1	1	0					
Bellamy	Trash	5	4	1	43	43	\$ 57.20	\$ 2,459.60	
Bellamy	Recycle	1	2	-1	43	-43	\$ 31.20	\$ (1,341.60)	recycle plus 1
Bowe	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	
Bowe	Recycle	1	1	0					
Bowie	Trash	2	2	0					
Bowie	Recycle	1	1	0					
Chic Acad	Trash	1	1	0	43	43	\$ 46.80	\$ 2,012.40	
Chic Acad	Recycle	1	0.5	0.5	43	21.5	\$ 44.55	\$ 957.83	1 x wk to EOW
Chic Comp	Trash	5	5	0					
Chic Comp	Recycle	3	3	0					
Chic High	Trash	5	5	0					
Chic High	Recycle	2	1.5	0.5	43	21.5	\$ 44.55	\$ 957.83	1 x wk to EOW
Fairview	Trash	7	3	4	43	172	\$ 57.20	\$ 9,838.40	
Fairview	Recycle	1	1	0					
Lambert	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	
Lambert	Recycle	1	1	0					
Litwin	Trash	2	2	0					
Litwin	Recycle	1	0.5	0.5	43	21.5	\$ 31.20	\$ 670.80	1 x wk to EOW
Selser	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	
Selser	Recycle	1	1	0					

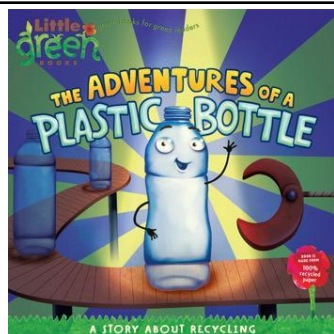
**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Stefanik	Trash	3	2	1	43	43	\$ 46.80	\$ 2,012.40	trash minus 1
Stefanik	Recycle	1	2	-1	43	-43	\$ 31.20	\$ (1,341.60)	recycle plus 1
Streiber	Trash	2	2	0					
Streiber	Recycle	1	1	0					
Szetela	Trash	1	1	0					
Szetela	Recycle	1	1	0					
Totals		68	56.5	11.5		537.5		\$ 28,048.47	

The Adventures of a Plastic Bottle and The Adventures of an Aluminum Can books

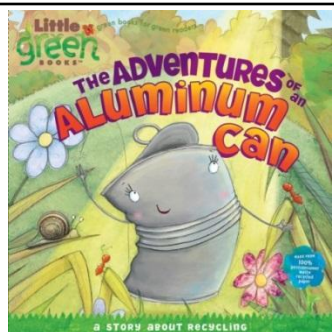
- Books as prizes for elementary school Bingo for Book events, which were held afterschool and very well attended by parents/guardians, students and siblings. I attended and spoke briefly about our recycling program and distributed wristbands.
- Books used in elementary school libraries with sequencing of events and vocabulary worksheets. Librarians and the science teacher at Lambert-Lavoie have indicated they will continue to use these books and worksheets and make them part of their yearly curriculum. When books are read in a group or individually students receive a wristband.



greeneducationfoundation.org/institute/lesson-clearinghouse/419-The-Adventures-of-Plastic-Bottles-and-Aluminum-Cans.html

Lesson Description:

- Explain the need to reduce the amount of trash they generate, and describe ways in which they can make changes in their actions to support waste reduction.
- Identify and describe the life cycle of consumer products.
- Communicate their ideas in writing and by creating graphic representations to classmates about the life cycle of a plastic bottle or aluminium can.
- Understand and summarize informational text.



Posters/Stickers

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

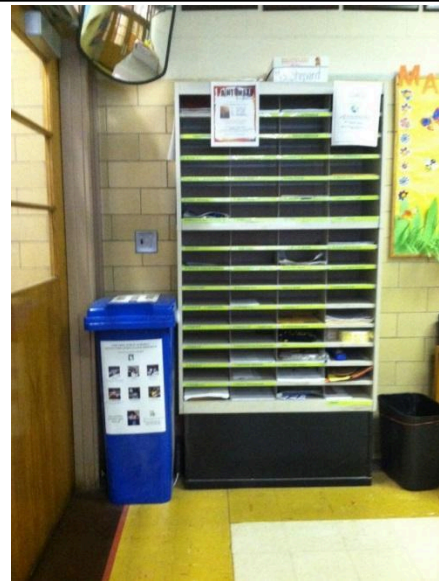
- Chicopee Public Schools Single Stream Recycling Program posters are placed throughout the district in classrooms, offices and general areas and all recycling baskets and carts have a Chicopee Public Schools Single Stream Recycling Program sticker.

Massachusetts Correctional Industries – printed our poster and recycling stickers

mass.gov/eopss/law-enforce-and-cj/prisons/offices-and-divs/masscor

Recycling Carts and Baskets

- Distributed 200 baskets, 63 carts and 41 quart baskets throughout the school district.



**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

	
Busch Systems	buschsystems.com Michelle Dunn 800-565-9931 michelled@buschsystems.com

Recycling Policy

- “All Chicopee Public Schools recycle materials that would otherwise become waste, including paper, cardboard, bottles and cans, throughout the school buildings and grounds in support of the Massachusetts Department of Environmental Protection’s waste ban. Success of our recycling program is based on the cooperation of all individuals in our school community.” This statement was published in school newsletters, school websites and added to the school rental agreement.
- Discussed at beginning of school year meetings.
- Copies of policy to all building principals, custodians, cooks and afterschool programs.

Recycling Videolabs for Middle Schools

- Purchased recycling videolab kits for Bellamy Middle School, Fairview Middle School and Chicopee Academy Middle School.
- “My 6th grade science teacher and my special education teacher both used the Videolab and truly enjoyed it. The students found it very interesting and relative to our recycling efforts here.” John Leonard, Principal, Chicopee Academy

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

- “All 6th grade students participated in four days of lessons. It was very educational. Students and myself, as the teacher, learned a great deal. Students reported having fun doing the hands on activities. I would use it again and recommend it to other classes. Although it was fun for students and very educational, some of the math was a "stretch" for students. There were also some typos in the answer key and on student work sheets. Once the bugs were worked out, it went great. I did not run every one of the labs, as I didn't always have the equipment (like a blender) to do them all. The video was very well done and informative, but one more recent than 1994, would be great. Overall, a fun and informative program.” Jen Wysk, teacher, Fairview Middle School

Single Stream Recycling

- All schools and buildings across the district use single stream recycling.

Life after the Grant

- Recycling audits will continue to ensure all schools and buildings across the district use single stream recycling.
-

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Recycling Activities by School

Barry	After fun day activities students clean outside, sort trash/recycle and receive a wristband.
Belcher	Students received EPA Planet Protector workbooks with wristbands.
Bellamy	Using recycling videolab kit to promote and educate students.
Bowe	Meeting with Bowe Garden Club, Chicopee Public Schools Single Stream Recycling Program PowerPoint slideshow, EPA Planet Protector Trash and Climate Change workbooks, certificates and distributed wristbands. Very active green team/garden club.
Bowie	Science teacher uses as part of a life science unit and discusses the importance of recycling, shows Chicopee Public Schools Single Stream Recycling Program PowerPoint slideshow and distributes wristbands.
Chicopee Academy	Using recycling videolab kit to promote and educate students.
Chicopee High	Ecology club promotes recycling efforts and recycling link from school webpage.
Chicopee Comprehensive	A recycling club helps and promotes recycling efforts in the school.
Fairview Middle	Meetings with Fairview Middle School Green Club, discuss importance of single stream recycling, students create signs and recycling posters and receive wristbands.
Lambert-Lavoie	Science teacher as part of a life science unit discusses the importance of recycling and distributes wristbands.
Litwin	After field day activities students clean outside, sort trash/recycle and receive a wristband.
Selser	Science teacher as part of a life science unit discusses the importance of recycling and distributes wristbands. Very active green team.
Stefanik	Students who recycled during lunch received a wristband. All classroom teachers received wristbands and distribute when they discuss recycling.
Streiber	Science teacher as part of a life science unit discusses the importance of recycling and distributes wristbands.
Szetela	All students received an EPA Planet Protector coloring books, certificates, stickers and wristbands.

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

Chicopee Public Schools Single Stream Recycling Program PowerPoint slideshow

CHICOPEE PUBLIC SCHOOLS SINGLE STREAM RECYCLING PROGRAM 1	The 3 R's of Recycling The 4 R's of Recycling  REDUCE  REUSE  RECYCLE  RETHINK! 2
 Bowe School Garden Club Presentation Wednesday, May 28, 2014 2:30 PM 3	 REDUCE  REUSE  RECYCLE  RETHINK! 3 R's--Reduce, Re-Use, Recycle video http://www.youtube.com/watch?v=wt0eZ9Nkeqk We're Going Green video http://www.youtube.com/watch?v=8DJ45Yc3urg 4

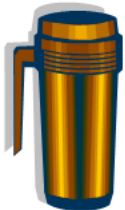
**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

 REDUCE  REUSE  RECYCLE  RETHINK! REDUCE • Close windows when heating or air-conditioning is running • Take shorter showers 3	 REDUCE  REUSE  RECYCLE  RETHINK! REDUCE • Turn off computers, monitors and TV's when finished • Turn off lights 5
 REDUCE  REUSE  RECYCLE  RETHINK! REDUCE • Turn off water • Vampire energy • Other examples 7	 REDUCE  REUSE  RECYCLE  RETHINK! REUSE • Clothes • Donate • Repair • Selling – tag sale • Other examples 8
 REDUCE  REUSE  RECYCLE  RETHINK! RECYCLE • Review bag of items – is it trash or recyclable? • What is single stream recycling? 9	 REDUCE  REUSE  RECYCLE  RETHINK! One recycling container takes them all 10

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

 REDUCE  REUSE  RECYCLE  RETHINK! 	 REDUCE  REUSE  RECYCLE  RETHINK!  • Papers • Cans • Plastic #1-7 • Cardboard • Aluminum • Cans 12
 REDUCE  REUSE  RECYCLE  RETHINK!   • Please empty all containers first • Do not include food waste, liquids, films, plastic bags, plastic wrap or foam cups 13	 REDUCE  REUSE  RECYCLE  RETHINK! RETHINK  • Bring reusable bag to the market or store • Can I use both sides of a paper? • Can it be recycled? 14
 REDUCE  REUSE  RECYCLE  RETHINK! RETHINK  • Should I printout that article or email? • Use a reusable mug 15	 REDUCE  REUSE  RECYCLE  RETHINK! RETHINK  • Use a reusable water bottle • Other examples 16

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

 REDUCE
 REUSE
 RECYCLE
 RETHINK!

**Toss It, Baby:
Single-Stream
Recycling Video**

<http://www.youtube.com/watch?v=exhgrxpeQws>

**Distribute CPS
recycle wristbands**

RECYCLING RESOURCES

Company/Organization	Link	Grade Level	Material
American Chemistry Council Plastics Division	plastics.americanchemistry.com/sustainability-recycling/recycling	All	- Articles - Games - Statistics - Videos
American Forest & Paper Association	paperrecycles.org	Elementary	- Actives - How to make paper video - Lesson plans - Posters
AXION International – in conjunction with scientists from Rutgers University, developed products that transform recycled consumer and industrial plastics into a myriad of structural products that are ideal replacements for	www.youtube.com/watch?v=pGBKwaSX6MM www.youtube.com/watch?v=2srE7muq-Hk www.youtube.com/watch?v=sygDBmfxoSU	All	- Recycled plastic used to make railroad ties and bridges - Technical information for thermoplastic bridges - Videos

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

traditional materials made from wood, steel or concrete. From girders, pilings and railroad ties to bridge structures.			
Glass Packaging Institute	www.gpi.org/recycling	Middle/High	- Articles - Glass recycling statistics
Keep America Beautiful	americarecyclesday.org/	All	- Contest and tips - Recycle Day events - Recycle pledge
National Association for PET (polyethylene terephthalate) Container Resources	napcor.com/PET/landing_petrecycling.html	All	- Activities - Educator resources - Kid's Corner - Recycling reports and facts - Videos
Northeast Recycling Council	nerc.org/	Middle/High	Policy and economic information
Santee Cooper (South Carolina's state owned electric and water utility)	vimeo.com/52493067	All	Toss It Baby: Single Stream Recycling Official Music Video produced by the employees Santee Cooper
Springfield, MA Materials Recycling Facility	springfieldmrf.org/site/	All	- Lesson plans - Videos
The Association of Postconsumer Plastic Recyclers	kidsrecyclingzone.com/	Elementary	- Games - Information

**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUSTAINABLE MATERIALS RECOVERY PROGRAM GRANT
CHICOPEE PUBLIC SCHOOLS
SINGLE STREAM RECYCLING PROGRAM**

Final Report – June 2015

The Can Manufacturers Institute	cancentral.com/recycling-sustainability	3 – 12	• Can history • Cans are cool video • Educational curriculum • How cans are made
The Green Team	thegreenteam.org	All	• Activities • Free equipment and materials • Lesson plans • Pledge cards • Posters • Resources
United States Environmental Protection Agency	epa.gov/students/	K – 12	• Activities • Educational material • Games • Resources
United States Environmental Protection Agency	epa.gov/recyclecity/	Elementary	• Activities • Games • Resources
Waste Management	wm.com/thinkgreen/index.jsp	All	• Activities • Discussion ideas • Lesson plans • Videos • Worksheets