Town of Middlebury Sustainable Materials Management Grant Final Report

April 2, 2024

Summary of Pilot Program

The Town of Middlebury applied for and received a Sustainable Materials Management Grant (SMM) from the Connecticut Department of Energy and Environmental Protection (DEEP) for up to \$115,000 to pilot principles of unit-based pricing and organics diversion at their Transfer Station. The contract (ID #2023-307) was executed on June 7, 2023. The Naugatuck Valley Council of Governments (NVCOG) entered into a separate contract with DEEP (ID #2023-180) to provide education and outreach services on behalf of Middlebury during the course of the grant.

The SMM pilot officially began on July 1, 2023. In the weeks leading up to the launch, contractor Waste Zero (WZ) and municipal staff distributed boxes of bags at the Middlebury Transfer Station to interested households. The boxes contained an explanatory info sheet with a message from the First Selectman (Attachment A). Due to a communication error, tabletop food scrap collection bins were also given out during the initial bag distribution, including a handful of bins that were intended for another municipality. Roughly 842 households were provided with boxes during this initial distribution, and approximately 32 afterwards.

During the grant period, NVCOG engaged in a number of outreach strategies on behalf of Middlebury. On 6/27/24, Channel 3 News did a two-minute spot on the upcoming pilot program. On 9/12/23, a "Trash Reduction Kickoff Fair" took place at the Middlebury Community Center, where residents were encouraged to drop by, view posters and flyers, and talk to waste reduction experts. On 9/19/23, an inperson "Community Champions Dinner" with pizza was held at the Middlebury Community Center. Additionally, on 10/20/23, NVCOG tabled at the Transfer Station to hand out free seed packets and biodegradable pots with compost from Quantum Biopower, the facility that processes Middlebury's food waste. Shifting to virtual meetings, NVCOG held a "Breaking Down the Trash" webinar on 11/9/23 to discuss the strategies behind the pilot in further detail. To keep up momentum in the winter, postcards with pilot statistics and waste reduction tips were mailed around 12/10/23 to all addresses that had picked up boxes. A Green Storytime event was also held 12/28/23 to educate Middlebury children about the importance of recycling and doing their part for the earth.

Holding events was only one prong of the multifaceted outreach approach. WZ and NVCOG spent hours tabling at the Transfer Station to distribute additional boxes and speak one-on-one with residents. Additionally, NVCOG maintained a Facebook presence at @NVCOGReduceTheTrash, with regular informational and educational postings in Middlebury community groups (Attachment B). Phone calls from residents were answered throughout the entire grant period, with subject matters ranging from program logistics to recycling questions to wondering where to get more bags.

In accordance with the contract, Middlebury rehired Waste Zero to continue pilot management services via this bid spec in fall of 2023 (Attachment E).

Middlebury's Phase II deliverable, a letter expressing intent to plan for permanence, was submitted via email on 1/23/24 (Attachment C). A waste advisory committee was assembled to begin planning. After an initial meeting on 1/19/24, the committee decided that it would continue deliberations without input from DEEP, NVCOG, or WZ. On 3/12/24, Middlebury submitted a letter to DEEP stating that although they support food scrap diversion, they do not support unit-based pricing and would not be continuing the program (Attachment D).

Appendix A Elements

Below please find a chart outlining all Appendix A deliverables and whether they have been completed.

Phase 1							
Deliverable Completed							
Pre-pilot planning	Yes						

Phase 2							
Deliverable	Completed						
Documentation of launch	Yes (Attachment A)						
Documentation of 1 meeting with partners	Yes (Biweekly check-in meetings)						
Letter of intent to plan for permanence	Yes (Attachment C)						

Phase 3							
Deliverable	Completed						
Letter stating plan for permanence has been established	No						
Summary of implementation actions	No						

Phase 4	
Deliverable	Completed

Documentation of final report	Yes
All elements of Appendix A are met	No

Administration						
Deliverable	Completed					
Funding released in accordance with Appendix A (DEEP: "These funds are for rehiring WZ after the five months expired.")	Yes (Attachment E)					

Pre- and Post-Implementation Waste & Recycling Data

Waste and recycling data were tracked by WZ. Metrics included clean food capture rate, pounds of food scraps captured, contamination rate, and percentage waste reduction compared to the previous year. The final set of data for Middlebury was made available by DEEP 3/26/24 and reads as follows:

Pilot Program	# of Weeks of Data	Collection Type	*Clean Food Capture Rate (prior week)	Food Scraps Captured (cumulative lbs)	Contamination Rate (prior week)	Waste Reduction	
Middlebury	25	Drop Off	25%	47,880	NA	4%	

Pilot Successes

- Hundreds of households throughout Middlebury were willing to give the pilot a try over the course of eight months, diverting nearly 50,000 lbs of organic waste from landfills or incinerators.
- A 25% clean food capture rate meant that one out of every four pounds of food waste estimated to have been generated in the pilot area was put in a green bag. This is a solid start for a voluntary program.
- Media coverage on Channel 3 news and in the Middlebury Bee-Intelligencer indicate relatively wide reach informing residents of the program.
- The free Compost Giveaway was well-received by community members, and demonstrated a closed-loop circular waste system.
- Resident interest in recycling increased as a result of this pilot. NVCOG received numerous phone calls and emails with recycling questions.
- A number of positive quotes were received from Middlebury residents, as recorded in NVCOG's progress reports and testimonial videos posted on Facebook.
- Although the survey sent to participants in December had a very low response rate, over 75% of respondents strongly liked or liked the pilot. More than half of respondents said that the pilot made them think more about their waste habits. (Attachment F)

Pilot Challenges

- The most common feedback we heard from the residents: the green bags are too big. Rather
 than a single 8 gallon bag, they would prefer two 4-gallon bags. This would allow them to take
 out the decomposing food scraps more often, and better control odor/flies.
- The inclusion of unit-based pricing as a consideration for permanence was not a good fit for Middlebury.
- The level of involvement from DEEP and its consultants in the execution of the grant felt excessive at times, and was not necessarily communicated upfront.
 - Example: The contract stated "at least one meeting" with DEEP during Phase 1 and Phase 2, whereas DEEP asked for biweekly meetings.
- NVCOG saw low attendance at both in-person and virtual events.
- NVCOG experienced some trouble engaging partners for outreach. One directive from DEEP was
 to participate in existing town events but unlike other larger municipalities, Middlebury only
 has a few events, and not all of them were appropriate for tabling (such as the Christmas Tree
 Lighting).
- Several hundred dollars were spent sending approx. 650 postcards that asked residents to participate in a survey. We only received 14 responses, demonstrating that this was an ineffective way to communicate with participants.

Metrics Applicable to Other CT Municipalities

Other Connecticut towns may be interested in the data listed in the blue chart, as an indicator of whether a similar pilot would make sense for their community. A demographic analysis can help those communities understand what similarities and differences they share with Middlebury, and whether its SMM metrics may be applicable. As a reminder, Middlebury's pilot only applied to Transfer Station users as opposed to the full population.

Metric	Middlebury	Comparable Communities (Census Designated Places with stats +/-10%)
Population	7,807	Haddam, Brooklyn, Woodstock, Litchfield, Old Lyme, Easton, Thomaston, Durham, Lebanon
Population density	422	Essex Village, New Hartford Center, Northwest Harwinton
Square mileage	18.5	Westport, New Haven, East Hartford, Stratford, Hartford, Orange
Median household income*	\$135,114	Weatogue, Newtown, Southport, West Simsbury, Cos Cob, Riverside
Poverty rate	5.2%	Comparison unavailable
Owner-occupied rate	89.9%	Comparison unavailable
Language other than English spoken at home	11.7%	Comparison unavailable

All Middlebury stats are from census.gov. Comparisons are from usa.com. *Income comparison data is from 2010-2014, so it is outdated.

Note that further investigation would need to be undertaken to determine if the comparable communities have a similar waste management system to Middlebury's.

Next Steps

Per the letter dated 3/12/24, Middlebury has decided not to pursue a permanent waste reduction program, due to the lack of support for unit-based pricing and the long-term financial infeasibility of a standalone food scraps program. However, Middlebury does plan to continue a voluntary food scrap diversion pilot that is administered by the Town.

Attachments

- Attachment A: Middlebury Trash Reduction Pilot Info Sheet 7.1.23
- Attachment B: Selected Posts from NVCOG's @NVCOGReduceTheTrash Facebook Account
- Attachment C: Middlebury Letter of Intent 1.23.24
- Attachment D: Middlebury Final Letter 3.12.24
- Attachment E: Invoice demonstrating WZ services beyond initial 5 months 11.30.23
- Attachment F: Survey summary 12.10.23

Report Prepared by Christine O'Neill Environmental Planner II, NVCOG coneill@nvcoqct.gov | 203-489-0351

HELP MIDDLEBURY CUT THE TRASH IN HALF! TRASH REDUCTION PILOT PROGRAM

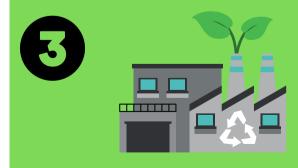
Starts July 1, 2023



CUT YOUR TRASH IN HALF BY LIMITING YOUR HOUSEHOLD TO TWO ORANGE BAGS PER WEEK! ORANGE FOR TRASH, GREEN FOR FOOD SCRAPS.



DROP OFF
ORANGE BAGS
FOR TRASH AS
USUAL AND
GREEN BAGS IN
A NEW
CONTAINER AT
THE TRANSFER
STATION.



YOUR FOOD SCRAPS
WILL BE TURNED INTO
RENEWABLE ENERGY AT
AN ANAEROBIC DIGESTOR.

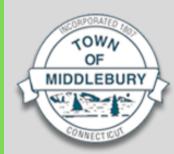
A NOTE FROM THE FIRST SELECTMAN

Connecticut's trash is piling up, and we are quickly running out of capacity to dispose of it. **Disposal costs are rising** as communities must ship waste out of state.

Middlebury has been awarded a grant from the Connecticut Department of Energy and Environmental Protection (DEEP) to run a year-long Trash Reduction Pilot Program.

We have to do something to address the waste crisis and get ahead of rising costs, so I am asking all residents who use the Transfer Station to participate in this FREE pilot program.

Your participation and feedback will help us decide if we want to make it permanent. **Thank you for giving it a try.**



FIRST SELECTMAN ED ST. JOHN

QUESTIONS? WE'RE HERE TO HELP.

(203) 489-0351

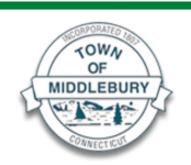
ReduceTheTrash@nvcogct.gov

ReduceTheTrashCT.com/Middlebury

HOW-TO:

Trash Reduction Pilot Program

Starts July 1, 2023





Q: WHAT'S IN THE BOX?

A one-year supply of free bags: 104 Orange Trash Bags & 52 Green Food Scraps Bags! We are challenging families to cut the trash in half by sticking to 2 orange bags per week.



Q: WHAT GOES IN THE GREEN BAG?

Food Scraps. Fruits & vegetables, meat & seafood (including bones), eggs & eggshells, leftovers & spoiled food, coffee grounds & tea bags, pastas, bread, and grains. **Please do NOT include plastic, pet waste, sanitary items, or metal.**



Q: WHAT GOES IN THE ORANGE BAG?

Trash! Anything that doesn't go in the green food scrap bag and can't be recycled.



Q: WHERE DO I BRING MY BAGS?

Both bags will go to the Middlebury Transfer Station. The orange bags go in the usual trash area (where you put your white/black bags now), and there will be a separate container for the green bags. Easy, right?



Q: WHY CAN'T I USE MY NORMAL TRASH BAGS?

We are asking you to use ONLY the special orange trash bags to cut the trash in half! Using these bags will make you mindful about how much trash you generate - the goal is to make this supply last a full year by using 2 orange bags per week! We are also building the habit of using special town trash bags that help "measure" each household's trash.



Q: DO I STILL RECYCLE?

YES! Continue to put recyclables in the **blue bin** - no plastic bags, please! Go to **RecycleCT.com** with questions.



Q: DO I NEED TO PUT ANOTHER GARBAGE CAN IN MY KITCHEN?

Do what works best for your household! You could get (or repurpose) a small container with a lid to hold the green food scraps bag; you could keep the green bag loosely tied in your trash cart; or you could leave the bag in your freezer. Baking soda helps with odors.

Q: IS THIS ACTUALLY GOING TO WORK?

- Turning our food waste into renewable energy makes a huge difference. The program also introduces
 the idea of moving the cost to dispose of trash OUT of your taxes and INTO the bags. The less trash
 you make, the less you would pay. With these tools, you can reduce your trash and save money.
- You may be trying this for the first time, but cities all over the U.S. (and the world!) have **successfully** implemented similar trash reduction programs. **Middlebury will succeed with your participation!**

ReduceTheTrash@nvcogct.gov

(203) 489-0351

ReduceTheTrashCT.com/Middlebury



Pilot program for trash in Middlebury

Pilot program for trash in Middlebury

...

Published by Tom Dougherty ② · August 16, 2023 · ❖

Attention Middlebury : Naugatuck Valley Council of Governments will be at Middlebury Shepardson Community Center on Sept. 12th 6PM - 8PM to host the "Middlebury Trash Reduction Kickoff Fair"!! This event will provide residents an opportunity to learn about the Trash Reduction Pilot program happening in their town. We hope to see all of you there and have a great discussion about reducing the trash!

MIDDLEBURY TRASH REDUCTION PILOT KICKOFF FAIR



WHERE & WHEN

MIDDLEBURY SHEPARDSON COMMUNITY CENTER SEPT. 12TH 6PM - 8PM

WHAT TO EXPECT

A "FAIR" STYLE EVENT
WHERE PEOPLE CAN TALK
TO EXPERTS AND RECIEVE
INFORMATIONAL
MATERIALS ABOUT
MIDDLEBURY'S TRASH
REDUCTION PILOT!

CONTACT

TDOUGHERTY@NVCOGCT.GOV





Hello Middlebury Trash Reduction Pilot participants! Naugatuck Valley Council of Governments will be hosting an informational presentation about the new trash reduction program in Middlebury. This event will include a slideshow presentation in and pizza and at the Middlebury Shepardson Community Center on Sept. 19th at 6pm. For those who would like to attend please RSVP at: tdougherty@nvcogct.gov

MIDDLEBURY TRASH REDUCTION PILOT COMMUNITY CHAMPIONS DINNER

EAT PIZZA. TALK TO EXPERTS. LEARN ABOUT REDUCING WASTE.

We welcome all pilot participants and stakeholder groups who want to learn more about the program or take an active role in promoting it!

SEPT 19TH, 6PM-8PM
SHEPARDSON COMMUNITY
CENTER

PLEASE RSVP AT:
TDOUGHERTY@NVCOGCT.GOV



FUNDING PROVIDED BY THE SUSTAINABLE MATERIALS MANAGEMENT GRANTS PROGRAM
ADMINISTERED BY THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

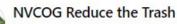
Published by Christine O'Neill ② · August 7, 2023 · ❸

Hey, Middlebury! It has been awesome handing out orange (trash) and green (food scraps) bags to kick off the Trash Reduction Pilot. Even if you no longer see the blue tent, you can still find a Transfer Station attendant if you have questions or didn't receive your initial shipment.

Remember - two orange bags a week and one green will help Middlebury cut the trash in half! 🎌







Published by Tom Dougherty ② · October 30, 2023 · ❸

riendly reminder Make sure there is no packaging when throwing out your food scraps in the pod waste bins at the transfer station! This will keep the contamination rate down when the food processed into compost and renewable energy. Thank you for being a trash reduction hampion!!



Images posted together on FB 8/4/23

This is a recycling dumpster in our region. Can you zoom in and find anything that doesn't belong? Swipe for answers!



Attention Middlebury! 🏂 🔊 A friendly reminder that our Breaking Down the Trash Webinar is this Thursday at 6pm. This will show a behind the scenes look at the Trash Reduction Pilot that's been happening in Middlebury. To sign up, please follow the link below!

Registration link: https://bit.ly/46xy4tx



BREAKING DOWN THE TRASH WEBINAR

NOV. 9TH, @ 6 -7:30PM

Register Online via Zoom: https://bit.ly/46xy4tx

For more info or help registering, call or email: 203-725-3096 tdougherty@nvcogct.gov Learn about the strategies behind the green & orange bags in the **Middlebury Trash Reduction Pilot and** provide feedback!



NVCOG Reduce the Trash

Published by Tom Dougherty ② · November 16, 2023 · ❸

Naugatuck Valley Council of Governments and WasteZero went to the Town of Middlebury Transfer Station to hand out compost made from your food scraps, along with herb seeds 5 1. We had a great time educating residents about the Trash Reduction Program and helping people participate! To Sale

We loved to see a nearly full food scrap bin while we visited!

■ Reminder ■ If you or someone you know haven't received a FREE box of food scrap bags and trash bags, you can see the Transfer Station attendant to receive one!



Hi Middlebury! If you participate in the Trash Reduction Pilot, you'll be receiving a postcard in the next few days with pilot stats, ptips to reduce holiday food waste, And a great, big THANK YOU for your hard work so far!

Thank You Middlebury

Your Trash Reduction Pilot is working! Thank you for separating your food scraps!

With the holiday season upon us, we want to thank you or your efforts to reduce waste, celebrate the successe the program, and share some tips to reduce food wast

Way to go!

is time last year.

Bince July 1st, Middlebury has: aptured 1 out of every 4 pounds of od waste in the pilot area. ollected 23,840 lbs of food scraps. educed trash by 8% compared to this me last year. creased recycling 11% compared to

Remember:

- · Plan ahead; only cook wh will actually be eaten.
- · Remind guests to bring reusable containers to sh leftovers.
- · Use your green bags for a inedible food scraps.
- · Save peels and bones to n broth!

Haven't received your free green and orange bags yet? Ask an attendant at the Transfer Station and help Middlebury cut the trash in half! Call 203-489-0351 with questions.

Funding provided by the SMM grant program administered by CT DEEP

See insights and ads

Boost post

1 3

ري Like

Comment



Most relevant •

1 comment 2 shares



Write a comment...











Naugatuck Valley Council of Governments Way to go #MiddleburyCT residents!

13w Love Reply Hide





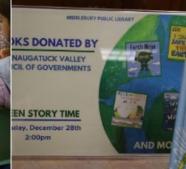
NVCOG Reduce the Trash

Published by Tom Dougherty . December 29, 2023 . .











Naugatuck Valley Council of Governments is with NVCOG Reduce the Trash.

December 28, 2023 · @

NVCOG was at the Middlebury Public Library for our Green Storytime event where we read an eco-friendly book us and had residents participate in Recycling activities. Thank you to all who came to support education on how to reduce the trash!

Special thanks to the Library Director, Jo-Ann LoRusso, for helping us put this event together. #CommunityEngagement



TOWN OF MIDDLEBURY

Office of the Selectmen

1212 Whittemore Rd., Middlebury, CT 06762

TEL: 203.758.2439 FAX: 203.758.8629 www.middlebury-ct.org

January 22, 2024

Sent Via Email to: deep.recyclingprogram@ct.gov

State Department of Energy and Environmental Protection Waste and Engineering Division 79 Elm Street Hartford, CT 06106-5127

Re: Middlebury SMM Grant ID# 2023-307

Dear DEEP Recycling Program,

Please allow this letter to serve as a notification that the Town of Middlebury intends to develop a plan to implement a permanent program for the Town-Wide food scrap diversion program.

Sincerely,

Edward B. StJohn

First Selectman

Town of Middlebury

CC: Daniel Norton, Director of Public Works

Food Scrap Diversion Committee



TOWN OF MIDDLEBURY

Office of the Selectmen

1212 Whittemore Rd., Middlebury, CT 06762

TEL: 203.758.2439 FAX: 203.758.8629 www.middlebury-ct.org

March 12, 2024

State Department of Energy and Environmental Protection Waste and Engineering Division 79 Elm Street Hartford, CT 06106-5127

Sent: Certified Mail, Signature Required

Also Sent Via Email to deep.recyclingprogram@ct.gov

Re: Middlebury SMM Grant ID #2023-307

Dear DEEP Recycling Program Coordinators,

The Town of Middlebury supports the green initiative of food scrap separation and diversion; however, it does not support the Mandatory Unit Based Pricing (UBP) being implemented as an essential part of making this program work.

Therefore, please allow this letter to serve as official notification that the Town of Middlebury will not continue to pursue a permanent food scrap collection program administered by the Connecticut DEEP through the Sustainable Materials Management (SMM) Grant.

The Town of Middlebury plans to continue a Town administered pilot program to promote food scrap separation and diversion and make provisions for our residents to voluntarily separate their food scraps at our Transfer Station.

Thank you for the opportunity to participate in the DEEP program.

Sincerely,

Edward B. St. John First Selectman

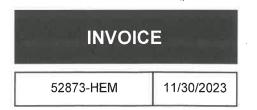
Town of Middlebury

CC: Daniel Norton, Director of Public Works

Solid Waste Reduction Working Group

Public Works Commission

WASTEZERO 8396 Six Forks Rd Ste 103 Raleigh NC 27615 800-866-3954 Fax:



Remit To: WasteZero Inc 8396 Six Forks Rd Suite 103 Raleigh, NC 27615

Bill To:

Town of Middlebury 1212 Whittemore Rd Middlebury CT 06762 UNITED STATES OF AMERICA Ship To:

Town of Middlebury 1212 Whittemore Rd Middlebury CT 06762 UNITED STATES OF AMERICA

Terms: Net 30

Due Date :

12/30/2023

Termo :						do Buto i				44
Qua	ntity	Item Nun	nber	Rev	Description			Price	Extension	
Pack Slip #	Ship	Date	PO Number	Order Da	te	Threshold Disc %	Ship Via			FOB
	1.00	151439		Α	Prograi	n Management - Level	1	1,200.000000	EACH	1,200.00
11542-HEM	11/	30/2023	Oct/Nov	11/30/202	23	0.00%				•
90	1.00	154514		1	Outread	ch		175.000000	EACH	175.00
11542-HEM	11/3	30/2023	Oct/Nov	11/30/202	23	0.00%				

Program Management for October and November (2 months @ \$600 = \$1200)

30 - 70-30 - 6092

All Prices Are Shown in United States Dollar

Oct/Nov

Thank You

Subtotal : Threshold Disc : 1,375.00 0.00 0.00

Freight : Total :

Tax:

0.00 1,375.00

Middlebury Trash Reduction Handout Survey

14 Responses

03:06 Average time to complete

Active Status

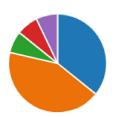
1. Are you a Trash Reduction Pilot Participant?





2. How do you like the program?





3. Are you separating out food scraps, recycling, and trash?





4. How many orange trash bags do you use per week?





5. How many green food scrap bags do you use per week?





6. How many people live in your household?

Latest Responses

"2"

Responses

"2"

7 respondents (54%) answered 2 for this question.

two
5

7. Has this pilot made you think about your waste habits more?



8. What would you change about the program?

Latest Responses

12 Responses "We have experienced this type of recycling in South Korea, where it has bee...

"I would make the food scraps dumpster cover easier to open. It can be quite \dots

"I don't like being forced into a governental program the card the town sent \dots

7 respondents (58%) answered bags for this question.

governental program food scraps plastic bags

Maybe this could be advertised bags and plastic compostable bags faster deposits

recycling center recycling
orange bags

program bags could be thinner

Smaller bags bags bigger

smaller households

green bag bags and plates heavy bag smaller people

9. If you are not a participant, please let us know why.

1

Latest Responses

Responses

"I don't like being told how to handle trash. Next thing you know we will hav...

10. For more information, visit https://reducethetrashct.com/middlebury/

0

Responses

Latest Responses