Summary of Solid Waste Projects & Resources Developed by Jennifer Griffith at NEWMOA

(some with help from Rachel Smith & Stephanie Frisch)

June 24, 2025

NEWMOA

Webinar Agenda

USDA-Funded Projects:

- Plastics
- PFAS
- Closed Landfills
- Waste Pharmaceuticals
- Food Waste
- Transfer Station Safety & Reduce Disposal Outreach
- Bulky Waste
- PAYT / SMART

- Other Projects:
  - Food Waste projects in NY (2019-2022)
  - Anaerobic Digestion (Jennifer did NOT work on this project)
  - MSW Disposal Interstate Flow Reports (2000 – ongoing)
  - Disposal Capacity Report (2021)

USDA Projects: Disclaimer

Funded by USDA Rural Utilities Services Solid Waste Management Grant

This material is based on work supported by the Rural Utilities Service, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations are solely the responsibility of the authors and do not necessarily represent the official views of the Rural Utilities Services.

USDA Project Partners

- Vermont
  - Northeast Kingdom Waste Mgmt. District (NEKWMD – all)
  - Central Vermont Solid Waste Mgmt. District (1 project)
  - Windham County Solid Waste Mgmt. District (1)
  - Department of Environmental Conservation
- New Hampshire
  - Lakes Region Planning Commission (1)
  - North Country Council (1)
  - Upper Valley Lake Sunapee Region (1)
  - Department of Environmental Services
- Maine
  - Androscoggin Valley Council of Governments (AVCOG - 3)
  - Department of Environmental Protection
- Massachusetts
  - Franklin County Solid Waste Management District (1)

USDA Project

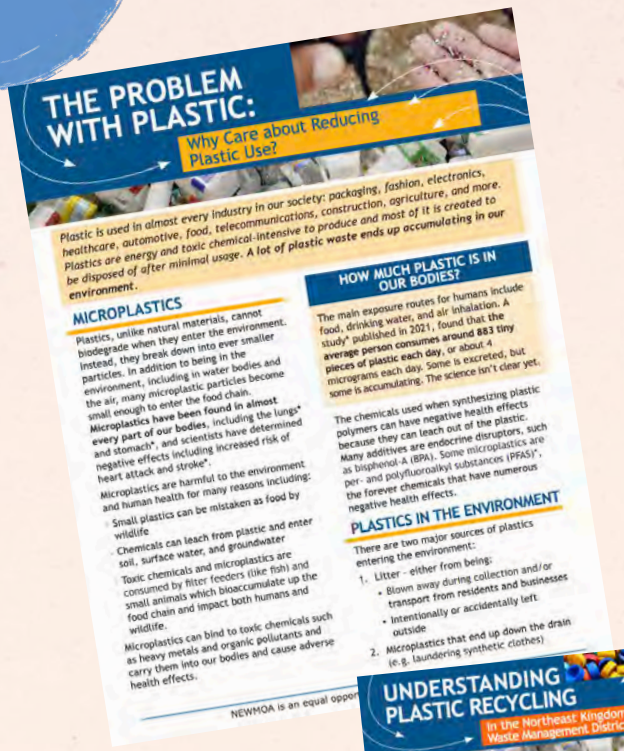
(2023 – 2025)

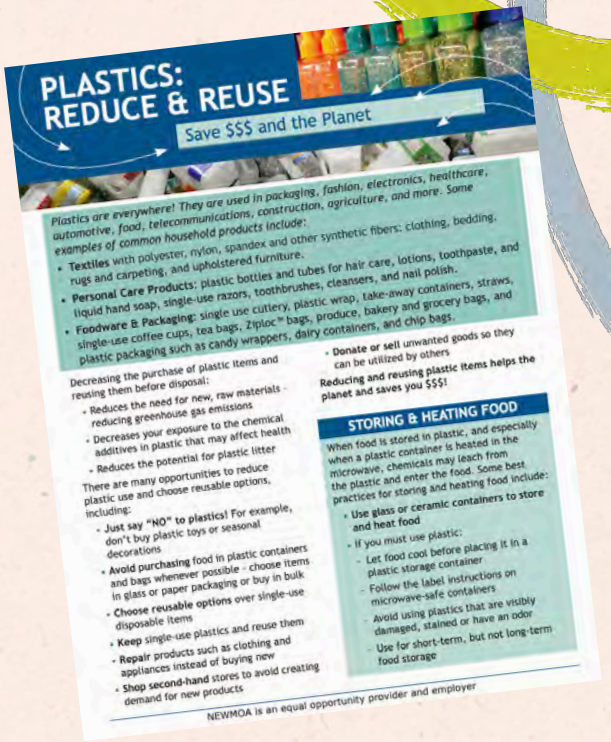
Plastics

Plastics Project

- Partners: AVCOG & NEKWMD
- Fact sheets for the public
  - Why Care?
  - Recycling “Dos & Don’ts”
    - Worked with Republic, Waste Management, Casella, & ecomaine
  - Alternatives
- Outreach to the public @ farmer markets in VT
- Promoting alternatives to food service guide
- Outreach to food service webinar: https://www.newmoa.org/event/plastic-in-food-service/
- Project website: https://www.newmoa.org/projects/plastics-in-consumer-products-food-service/

Five Factsheets





https://www.newmoa.org/plastics-in-consumer-products-factsheets/

Plastics in Food Service Guide

PLASTICS IN FOOD SERVICE: PROMOTING ALTERNATIVES

Plastics are energy and chemical-intensive to produce and most are created to be disposed of after minimal usage. **A lot of plastic waste ends up accumulating in our environment.**

Plastics are used in many categories of food service products, including but not limited to:

- **Customer Experience** such as dinnerware, takeout containers and single use condiments
- **Internal Operations** such as food purchase, storage & handling
- **Textiles** such as uniforms, tablecloths, napkins, carpets & upholstered furniture

Each of these is discussed further in this guide.

How Much Plastic is in Our Bodies?

The main exposure routes for humans include food, drinking water, and air inhalation. A study* published in 2021, found that the average person consumes around 883 tiny pieces of plastic, or about 4 micrograms each day. Some is excreted, but some is accumulating. The science isn't clear yet.

A study* published in 2025 indicates that the amount of plastic in the human brain has increased by 50 percent between 2016 and 2024, and that the brains of people who had dementia had three to five times more microplastics than those without dementia.

Definitions

Throughout this document, the term microplastics refers to all plastic particles less than 5 millimeters in size. Technically, particles less than1 micrometer (0.001 millimeter) are called nanoplastics.

Understanding where plastics are utilized in food service and how to minimize the purchase of single use plastics can save money and reduce waste generation, the use of harmful chemicals, and the amount of plastic entering the environment and water supplies.

WHY ARE PLASTICS HARMFUL?

Plastics, unlike natural materials, cannot biodegrade when they enter the environment. Instead, **they break down into ever smaller particles called microplastics and then get even smaller, known as nanoplastics**. In addition to being in the environment, including water bodies and the air, many microplastic particles become small enough to enter the food chain and cause harm to human health. Plastics contain chemical additives that enhance the functionality for different purposes and can add to toxicity. In the environment, these small plastics can bind to toxic chemicals such as heavy metals and organic pollutants and carry them into our bodies, causing adverse health effects. **Plastic has been found in almost every part of the human body** and scientists have determined negative health effects including increased risk of heart attack and stroke*.

Human exposure to plastics from food service can be from:

- Direct consumption of food impacted by microplastics
- Drinking water containing microplastics
- Breathing in and consuming microplastic fibers shed by plastic-containing textiles

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https://www.newmoa.org/plastics-in-consumer-products-factsheets/

USDA Project

(2022 – 2024)

PFAS

PFAS Project

- Partners: AVCOG & NEKWMD (and NH DES)
- Fact sheets for the public
  - Why Care?
  - Clothing & Other Textiles
  - Foodware & Packaging
  - Outdoor Recreation
  - Personal Care Products
- Outreach to the public @ farmer markets in ME & VT
- Promoting awareness & alternatives to food service guide
- Outreach webinars on food service
- One-on-one evaluation of a nursing home
- Analytical testing of cleaning & floor waxing products
- End of project national webinar slides & recording: https://www.newmoa.org/event/pfas-promoting-alternatives-webinar/
- Project website: https://www.newmoa.org/projects/pfas-in-consumer-products/

Overview Factsheet: Why Should I Care?

Key Takeaways:

- Factsheet addresses exposure, health effects and potential environmental impact
- Children can experience heightened exposure to PFAS due to hand to mouth ingestion and close contact with carpeting/rugs causing inhalation of PFAS-containing dusts

What You Can Do:

- Check labels, read ingredients, and be aware that PFAS are considered proprietary ingredients and manufacturers often do not disclose their use

What are PFAS & Why Should I Care?

Per- and Polyfluoroalkyl Substances (PFAS) are a large group of human-made chemicals known for their heat-stable, friction-reducing, and water-, grease-, and stain-resistant properties. PFAS have been added to many industrial and consumer products since the 1940s and there are thousands of different PFAS chemicals in use today. PFAS move easily in the environment and can be found in our water, food, soil, and air, often far away from where they were made or used by industry. PFAS are frequently called "forever chemicals" because they do not break down and build up over time in the environment, animals, and people.

There are many sources of PFAS in the environment. **This fact sheet focuses on use and disposal of PFAS-containing Consumer Products.** Understanding which products are likely to contain PFAS and how to avoid buying them, helps reduce your personal exposure and decreases the amount of PFAS entering the environment and drinking water supplies.

How Are People Exposed to PFAS?

A recent study* conducted by the U.S. Centers for Disease Control and Prevention (CDC) found that most people have PFAS in their body.

- The main exposure routes are ingestion of food and water and inhalation of dust that contain PFAS
- PFAS can be harmful to human health, particularly if someone is exposed to high levels for an extended period of time
- PFAS are minimally absorbed by skin so touching objects or water containing PFAS does not present a significant risk
  - The potential health impact from the application of PFAS-containing personal care products on the skin is unclear and further research is required

What Are the Health Effects?

Scientists have found exposure to PFAS can cause many effects, including:

- *Reduced immune system function*
- *Increased cholesterol levels*
- *Increased risk of pre-eclampsia in pregnant women*
- *Increased thyroid disorders and other hormone disruption*
- *Increased risk of liver, kidney, prostate, and testicular cancer*

Due to the thousands of different PFAS chemicals, assessing the risk of each compound, or combinations of compounds, on human health is difficult to assess. Scientists are still studying the health effects of exposures for the vast majority of PFAS chemicals and future findings may change our understanding of PFAS impacts on human health.

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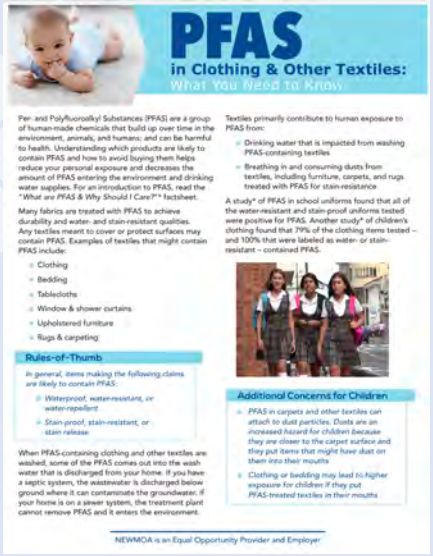
Want to limit PFAS exposure?
Reduce the number of PFAS-containing products you purchase!

Four Product Category Factsheets



All factsheets can be found at: www.newmoa.org/projects/pfas-in-consumer-products/

PFAS in Food Service Guide

PFAS in Food Service

Promoting Alternatives

What Are PFAS?

Per- and Polyfluoroalkyl Substances (PFAS) are a large group of human-made chemicals known for their heat-stable, friction-reducing, and water- and stain-resistant properties. PFAS have been added to many industrial and consumer products since the 1940s and there are thousands of different PFAS chemicals in use today. ***PFAS are frequently called "forever chemicals" because they do not breakdown and build up over time in the environment, animals, and people.***

PFAS are used in many categories of products that a food service facility might use:

- **Food packaging** such as takeout & other disposable containers
- **Non-stick cookware**
- **Textiles** such as uniforms, tablecloths, napkins, and upholstered furniture
- **Carpets** & cleaning
- **Floor cleaning,** stripping & waxing

Each of these is discussed further in this guide.

Understanding which products are likely to contain PFAS and how to avoid buying them helps reduce worker and customer exposure and decreases the amount of PFAS entering the environment and drinking water supplies.

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https://www.newmoa.org/wp-content/uploads/2024/07/PFASinFoodServiceGuide_Final.pdf

USDA Project

(2021 – 2023)

Closed Landfills

Closed Landfills Project

- Partners: NEKWMD and NH DES
- Visited old closed landfills in NH & VT
- Developed NH & VT-specific plus a “generic” version:
  - BMP Guide
  - Inspection Checklist
  - Municipal Officials Reminder Checklist
- Outreach webinars to NH Municipal Association & NEKWMD
- End of project national webinar: https://www.newmoa.org/event/closed-landfills-hazards-best-practices-what-you-need-to-know/
  - **Recording might be a good training resource**
- Project website: https://www.newmoa.org/projects/closed-landfill-project/

Best Management Practices & Requirements Guides (8 pages)

NH: www.newmoa.org/wp-content/uploads/2023/03/NH_Closed_Landfill_BMPs.pdf
VT: www.newmoa.org/wp-content/uploads/2023/03/VT_Closed_Landfill_BMPs.pdf
Writable: https://www.newmoa.org/wp-content/uploads/2023/08/closed_landfill_bmps.pdf

CLOSED LANDFILLS IN NEW HAMPSHIRE

GUIDE TO BEST MANAGEMENT PRACTICES & REQUIREMENTS

Closed landfills are a long-term liability for municipalities because they can create environmental and other problems that negatively impact residents, visitors, and others. Landfill owners, including municipalities, are responsible for the costs to cleanup environmental contamination. Therefore, **it is important that municipal officials are aware of the location and condition of all the closed landfills in their community**. Many New Hampshire towns have *more than one* closed landfill – one that long-time residents remember using (often near the location of the current transfer station) and one or more that was used before that one opened. Municipal officials need to know about and maintain all of them.

This Closed Landfill Best Management Practices (BMP) Guide is designed to help municipal officials understand the actions they should take to reduce the potential environmental contamination from closed landfills and to protect the health and safety of their community. Note that landfills that ceased operations *after July 9, 1981*, have additional requirements that are outlined on page 7 of this document.

Closed landfills can cause:

- **Contamination of water resources**
- **Generation of methane gas**
- **Physical hazards**

NHDES IS HERE TO HELP!

The New Hampshire Department of Environmental Services (NHDES) can answer questions and provide advice and limited technical guidance to municipalities. NHDES is most interested in providing cooperative assistance to address problems as soon as they arise. Contact NHDES' Solid Waste Management Bureau: (603) 271-2925 or solidwasteinfo@des.nh.gov. Additional information is available from NHDES: https://www.des.nh.gov/waste/solid-waste.

TWO INSPECTIONS EACH YEAR

A walkover inspection should be conducted at least twice a year by a knowledgeable municipal employee or a professional engineer. Inspections should be conducted in the spring following snowmelt and after/during the annual mowing event in the fall. Inspectors should look for:

- **Soil cover:** tree growth, animal burrows, erosion, and exposed waste
- **Grass cover:** bare spots and dead grass/vegetation (could indicate a methane gas problem)
- **Cover grading:** settlement or areas where water can pond; and sloughing of side slopes
- **Stormwater management:** obstructions in ditches, culverts and other features, erosion, or excessive sediment accumulation
- **Access restrictions:** evidence of ATVs, dirt bikes, or other unauthorized access

A separate Closed Landfill Inspection Checklist is available at: https://www.newmoa.org/nh_inspection_checklist/.

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Inspection Checklists (4 pages)

NH: https://www.newmoa.org/wp-content/uploads/2023/03/NH_Inspection_Checklist.pdf
VT: https://www.newmoa.org/wp-content/uploads/2022/05/VT_Inspection_Checklist.pdf
Writable: https://www.newmoa.org/wp-content/uploads/2023/08/inspection_checklist.pdf

CHECKLIST

Name: _____

Organization and Position: _____

_____

Landfill Name: _____

Town Where Landfill is Located: _____

Landfill Street Location: _____

Date of Inspection: _____

Circle the most applicable response for each question

VEGETATION	1	2	3	Notes/Action Items
Are trees or bushes growing on the landfill, including the side slopes?	None	Areas of brushy growth	Trees/bushes cover large areas	
Can you walk all the way around the landfill at the bottom of the side slope?	Yes	Some obstructed areas	Not at all	
Is grass growing over the entire landfill, including the side slopes?	Yes	Several small bare or mossy spots	Many large bare spots	
Are there animal burrows on the landfill, including the side slopes?	None	Several small	Many large or connected	

DRAINAGE	1	2	3	Notes/Action Items
Is the landfill graded so there are no depressions where water can pond? (if it hasn't recently rained, look for mossy growth or muddy looking bare spots)	Yes – no depressions	Several small depressions	Many large depressions	
Is there any evidence of erosion on the side slopes?	None	Several small concentrated channels a few inches deep	Many large channels with bare soil	
Are all drainage features that are located off the landfill (such as drainage swales/ditches, culverts, detention ponds) **free of obstruction** (including tree & shrub growth) **& no evidence of sediment build up?**	Yes – no obstructions & no sediment **OR** Not applicable – there are no off landfill drainage features	Some obstructions OR some sediment	Obstructions & sediment	

LANDFILL LEACHATE	1	2	3	Notes/Action Items
When walking around the landfill, is there any soil that is stained orange or an area where liquid is seeping from the slope?	No	A small dry area	Large wet area	
Is the leachate collection system functioning properly?	Yes **OR** Not applicable – no collection system		Visible Cracks or overflow	

LANDFILL GAS	1	2	3	Notes/Action Items
Are there any buildings located on the landfill itself?	No		Yes	
Are there any building or other structures located around the base of the landfill?	None	More than 100 feet away	Within 100 feet	
Are all gas vents in good condition?	Yes **OR** Not applicable – no gas vents	1 has cracks or missing screen	More than 1 is broken	
Is the gas management system functioning properly?	Yes **OR** Not applicable – no management system	Small area of stressed vegetation	Large area of dead vegetation	

PROPERTY ACCESS	1	2	3	Notes/Action Items
Is access to the property restricted?	Yes – gate locked & no way around	Somewhat restricted – some boulders or tree logs	No barrier to entry	
Are there "no entry" signs warning the public that there is a landfill?	Yes		No	
Is there evidence of unauthorized access (such as ATV trails or illegal dumping)**?**	No		Yes	

GROUNDWATER MONITORING WELLS	1	2	3
Are all groundwater monitoring wells at the landfill accessible & easy to find & covered & locked?	Yes – all in good condition & locked **OR** Not applicable – no groundwater monitoring wells	Hard to find – covered but not locked	Cannot find any of them
Notes/Action Items			

The results of each inspection should be shared with one or more senior municipal officials, such as the Selectboard Chair, the Town Manager, the Director of Public Works, and/or the Town Clerk.

- Any answers other than "1" require follow-up to address deficiencies.
- **Any answers of "3" require immediate attention** – contact the state for advice and assistance. Also consult the "Closed Landfills: Guide to Best Management Practices & Requirements" for more information

(available at: https://www.newmoa.org/closed_landfill_bmps/)

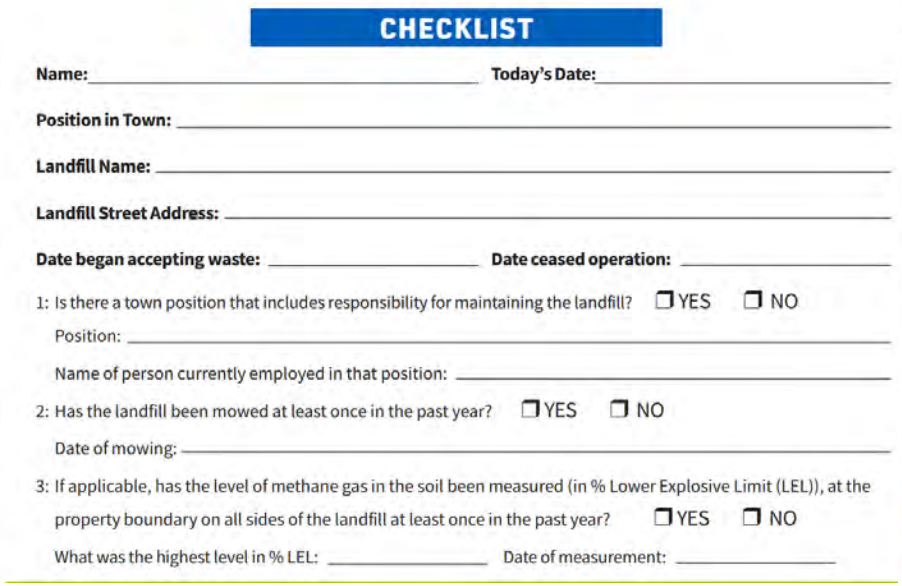
- Any answers of "2" indicate an issue that needs ongoing monitoring and/or attention before the situation worsens.

Yearly Tasks for Municipalities

- Delegate responsibility for maintaining the landfill(s)
- At least ONCE a year
  - Mow to prevent tree growth
  - Measure level of methane gas in soil (& inside nearby structures, if any)
- At least TWICE a year
  - Walkover inspection
  - Review results of each inspection **& address deficiencies!**
- For regulated landfills:
  - Follow requirements for groundwater monitoring & reporting
  - Submit required post-closure report(s)

Municipal Reminder Checklist (2 pages)

NH: https://www.newmoa.org/wp-content/uploads/2023/03/NH_Municipal_Checklist.pdf
VT: https://www.newmoa.org/wp-content/uploads/2023/03/VT_Municipal_Checklist.pdf
Writable: https://www.newmoa.org/wp-content/uploads/2023/08/municipal_checklist.pdf



CHECKLIST

Name: _____ **Today's Date:** _____

Position in Town: _____

Landfill Name: _____

Landfill Street Address: _____

Date began accepting waste: _____ **Date ceased operation:** _____

1: Is there a town position that includes responsibility for maintaining the landfill? ❒ YES ❒ NO

Position: _____

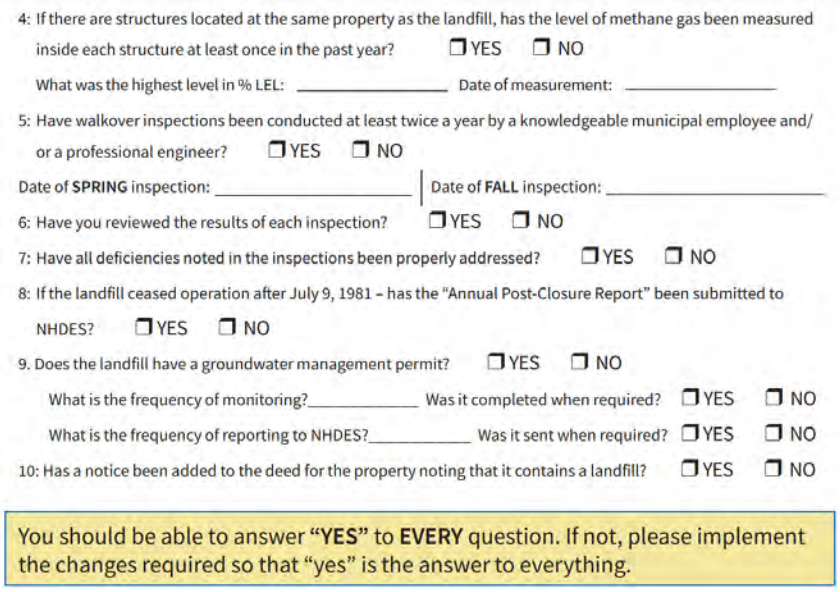
Name of person currently employed in that position: _____

2: Has the landfill been mowed at least once in the past year? ❒ YES ❒ NO

Date of mowing: _____

3: If applicable, has the level of methane gas in the soil been measured (in % Lower Explosive Limit (LEL)), at the property boundary on all sides of the landfill at least once in the past year? ❒ YES ❒ NO

What was the highest level in % LEL: _____ Date of measurement: _____



4: If there are structures located at the same property as the landfill, has the level of methane gas been measured inside each structure at least once in the past year? ❒ YES ❒ NO

What was the highest level in % LEL: _____ Date of measurement: _____

5: Have walkover inspections been conducted at least twice a year by a knowledgeable municipal employee and/or a professional engineer? ❒ YES ❒ NO

Date of **SPRING** inspection: _____ | Date of **FALL** inspection: _____

6: Have you reviewed the results of each inspection? ❒ YES ❒ NO

7: Have all deficiencies noted in the inspections been properly addressed? ❒ YES ❒ NO

8: If the landfill ceased operation after July 9, 1981 – has the "Annual Post-Closure Report" been submitted to NHDES? ❒ YES ❒ NO

9. Does the landfill have a groundwater management permit? ❒ YES ❒ NO

What is the frequency of monitoring?_____ Was it completed when required? ❒ YES ❒ NO

What is the frequency of reporting to NHDES?_____ Was it sent when required? ❒ YES ❒ NO

10: Has a notice been added to the deed for the property noting that it contains a landfill? ❒ YES ❒ NO

You should be able to answer **"YES"** to **EVERY** question. If not, please implement the changes required so that "yes" is the answer to everything.

Lessons Learned

- Mowing:
  - mowing the top is easy – but the side slopes not so much
  - All the landfills visited had woody growth (or big trees!) on the side slopes
- Many regulated old closed landfills are not submitting the reports that they should!
  - Some doing the groundwater monitoring/reporting but not inspection & other reports
- Difficulty evaluating landfills on private property
- Encroachment of development is real – either recent or in the past
- Luckily (?) many old unregulated landfills did a lot of burning so current generation of leachate and gas not a huge problem

USDA Project

(2019 – 2021)

Waste Pharmacueticals

Waste Pharmaceutical Project

- Partners: none
- Promoted use of DEA-compliant collection kiosks
- Worked with a nursing home in NH to install kiosks
- Worked with Kinney Drugs to install kiosks in 3 VT towns
- Provided waste destruction pouches & mail-to-destruction envelopes to home service providers
  - Androscoggin Valley Home Care
  - Orleans Essex Visiting Nurses Association & Hospice
- Battery waste focus too – worked with Call2Recycle to provide pre-paid collection boxes to NH DES & the NH nursing home
- Developed handouts:
  - Kinney Drugs kiosks public outreach
  - AV Home Care staff & clients
  - Orleans Essex VNA staff & clients & hospice staff
- Project website: https://www.newmoa.org/projects/pharmaceutical-waste-project/

USDA Project

(207-2019)

Food Waste

Food Waste Project

- Partners: AVCOG, NEKWMD & Lakes Region (NH)
- Reduce
  - Handout for residents
  - Outreach at events in NH (farmer markets) & VT (county fair)
- Recover & Donate
  - Handout for businesses with local donation info
  - Stakeholder workshops in ME, NH, & VT
- Compost (backyard)
  - Handout for residents
  - 8-page guide with local information
  - Outreach at events in NH & VT (see above)
- End of project national webinar (joint with NERC): https://www.newmoa.org/event/lessons-learned-from-implementing-the-food-recovery-hierarchy-webinar/
- Project website: https://www.newmoa.org/projects/keep-food-out-of-landfills/

Reduce Handout

Reducing Food Waste: *Tips to Save You Money*

Food waste makes up over 20 percent* of our trash. This wasted food is just part of the story. All of the resources – land, water, energy, labor, manufacturing, packaging, transportation – that went into growing the food and getting it to the table are also wasted – along with your money.

- A family of four in the U.S. throws out about $1,300 to $2,200 worth of uneaten food each year on average*
- Worldwide, the amount of land used to grow food that is never eaten is larger than Canada and India combined*
- 25 percent of all fresh water use in the U.S. goes to growing food that is never eaten*

The Solution?

It's simple – buy less! You'll save money and help the planet.

Most people don't realize how much food they throw away – from leftovers to uneaten fruits and vegetables – it all adds up.

Think Before You Buy

Once a week, open your refrigerator, look in your cabinets, and note what food you have:

- If it's been in there for a while, make a plan to use it up
- If you realize that you're unlikely to use unopened goods, donate them to your local food pantry before the labeled date

Take a few minutes to think about what meals you want to eat that week.

- What food do you already have that you can use? What do you need to buy?
- Consider what plans you have. For example, if you know you'll be going to a restaurant one night and will have leftovers, you won't need as much food at home.

Make a list before going to the store so you:

- Don't buy more than you need – this will save you money
- Don't forget to get any ingredients that you'll need to make something with what you already have

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Helpful Storage Hints

When you come home from shopping, put new products on the shelf or in the drawer behind/under the same sort of items that are already there so the older ones move to the front/top and get eaten first.

Put leftovers and other items in your refrigerator in clear containers so you can see what they hold. Use a marker to label and date bags and other containers in your freezer so you know what's inside.

Store Food So It Lasts

A good way to extend the life of food is to freeze it. For best results, put your item in an airtight container or inside two layers of freezer bags. Almost anything can be frozen: meat, milk, cheese, bread and other baked goods, unused pasta sauce, soups, and much more. Bananas too mushy? Freeze them and then use them to make banana bread later.

Date Labels – Confused?

Food manufacturers and stores use a variety of dates on their products. **The dates are not related to food safety,** but many people think they are and throw out edible food.

"Best Before", "use by", "best by", "best if used by", "enjoy by", and similar dates have no standard definition and are suggestions related to quality. The food is still safe to eat after the date and probably still at its best quality. For the most part, you can trust your senses to know when food has gone bad. For example, milk, yogurt, juice, sauces, and many other items are well suited to the "look" and "smell" tests.

"Sell by" dates are meant for the store staff so that they can manage inventory. If the food is sold by that date, it will still have top-quality shelf life for some time afterward. For example, eggs are still good for three weeks or more after the date on the carton.

To reduce the consumer confusion surrounding date labels that leads to wasted food, the U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) issued updated information on food product labeling to encourage manufacturers and retailers to label using only a "Best If Used By" date.

More Information:

- Natural Resources Defense Council (NRDC) Save the Food: www.savethefood.com
- U.S. Environmental Protection Agency (EPA) Reducing Wasted Food at Home: www.epa.gov/recycle/reducing-wasted-food-home

This material is based on work supported by the Rural Utilities Service, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the author(s) and do not necessarily represent the official views of the Rural Utilities Service.

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Available at: https://www.newmoa.org/wp-content/uploads/2022/07/Reducing_Food_Waste_Template.pdf

The Problem with Date Labels

- **Date labels are NOT related to safety!**
- And there are NO standards
  - Selected by manufacturers
    - Conservative estimates of top quality
    - Keep in mind that manufacturers have an incentive to get you to buy more
  - Only federal requirement for a date label is for infant formula
  - Some states have scattered requirements:
    - ME only requires dates on packaged shellfish
    - NH only requires dates on pre-packaged sandwiches
    - VT only requires dates on packaged shellfish & ready-to-eat

Tremendous Waste

- **Throwing out needlessly = throwing out $$**
- Virtually all food is safe to eat after the date & most still at top quality
  - Examples:
    - Non-liquid dairy (yogurt/cheese): 7+ days
    - Eggs: 3+ weeks
    - Canned/boxed: 3+ months
  - Feeding America & Vermont Foodbank acceptance guideline fact sheets
    - https://dec.vermont.gov/waste-management/solid/materials-mgmt/food-donation/#Food-Donation-Guidance
- Use your senses – and common sense!

Outreach on Dates

County Fair in Vermont

- Interacted with 200+ people over 2 days
  - ~50% thought labels are about safety & throw food out
  - Reported to be a source of conflict in the home
  - Many took a photo of display panel to share with others

Composting Handout

BACKYARD COMPOSTING OF FOOD WASTE: *IT'S AS EASY AS 1:3*

Food waste is a major problem in the U.S. According to the EPA, over 20 percent of municipal trash is food waste – that's over 38 million tons in the U.S. each year. When you throw out food, it takes up precious space in landfills and produces methane gas as it decomposes, which contributes to climate change.

You can help reduce your impact by composting your food scraps at home. Composting is a natural process that recycles organic material, such as yard debris and food scraps, into a fertile soil amendment.

Why Compost Food Waste at Home?

There are many benefits of home composting. It:

- Improves soil health, which can improve water retention and reduce the need for expensive fertilizers and pesticides.
- Saves you and/or your town money since the material is removed from waste disposal.
- Reduces the methane emissions from land-filling food waste (methane is a potent greenhouse gas).
- Eliminates the need for you to transport your food waste to a compost collection facility (if one exists).
- Provides an option when a local collection facility is not available.

Start Slow – DO NOT add meat, bones, fish, fats, and dairy to your compost pile. And do not add household animal (eg. cat/dog) poop!

These materials can harbor dangerous bacteria and other pathogens. They are also "smelly" and can attract pests.

What Can I Compost?

For best results, follow the 1:3 Rule. For every 1 part of green material that you add to your compost, top with 3 parts of brown material.

- "Green Material" – Food scraps, such as fruits and vegetables, nuts, eggs shells, bread crusts, coffee grounds, tea leaves, old herbs and spices, fresh cut green grass, and more.
- "Brown Material" – Yard waste, such as dried leaves, dried grass, and chipped wood. You can even add things like paper towels and napkins; clean sawdust or shavings; and pet fur/hair.

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Overcoming Myths About Composting

Myth: *I Don't Have Time to Compost My Food Scraps*

Fact: Composting is easy and does not take a lot of time.

1. Collect fruit and vegetable scraps in a container in your kitchen.
2. When the container is full, bring it outside and toss the scraps in the compost pile or bin.
3. Cover with a layer of "brown material".
4. Give it a quick stir with a shovel or pitchfork so that the "new" scraps get mixed in with the organic matter that is already decomposing.

Myth: *I Don't Have a Garden So I Don't Need Compost*

Fact: The finished product – "compost" – is dark brown/black and has an earthy smell. It is commonly used to enrich home garden soil and flower beds, but it can also be placed:

- Around trees, shrubs, and other plant areas where you might otherwise add mulch or rocks; or
- On problem areas on your lawn to improve the soil and help grass growth.

Myth: *My Backyard Will Smell of Rotting Food*

Fact: Compost should smell like soil – anything else indicates your compost is not properly balanced. The most likely cause is too much "green" material or not enough air is getting into the mix. Follow these steps to help reduce odors:

- Add a layer of "brown" matter (i.e., sawdust, which is particularly helpful, or dried leaves, grass, or wood chips) right after dumping food scraps into your compost.
- Mix it every week or two.
- Maintain a proper moisture level – compost that is too dry (i.e., material is dusty or gritty) decomposes more slowly, but compost that is too wet (i.e., soil that is clumpy or matted together, or leakage from the bin) has a stronger odor.

Myth: *Compost Piles Attract Bears or Other Wildlife*

Fact: Bears are attracted by the smell of food. To avoid this, minimize the "scent" of food by:

- Following the "1 Part Green" and "3 Parts Brown" rule outlined above. Sawdust is a particularly good source of brown material.
- Stir the compost weekly to prevent smell and speed up decomposition.
- If you DO have a problem with bears, avoid putting out fruit scraps, as they can have a strong sweet smell as they decompose.

Check Our Additional Guidance for How to Get Started! www.newmoa.org/solidwaste/projects/food/publications.cfm

Additional Resources:

- EPA: www.epa.gov/recycle/composting-home
- Maine DEP: www.maine.gov/dep/sustainability/compost/index.html
- Vermont DEC: http://dec.vermont.gov/waste-management/solid/materials-management/organic-materials

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Available at: https://www.newmoa.org/wp-content/uploads/2022/07/Home_Composting_Template.pdf

8-page Composting Guide

COMPOSTING FOOD SCRAPS: HOW TO GET STARTED

A significant portion of the waste people discard includes organic material, such as food scraps and leaf and yard debris. According to the EPA, over 20 percent of municipal trash is food scraps – more than 38 million tons in the U.S. each year. Most of this material is landfilled. Organic material takes up limited landfill space, and, when it breaks down releases methane, a potent greenhouse gas.

You can help reduce your impact by composting your food scraps at home. *Composting is a natural process of transforming organics into a healthy soil amendment, simultaneously keeping the material out of landfills.*

Benefits of Backyard Composting:

- **Improves soil health**, which can improve water retention and reduce the need to buy fertilizers, compost, and pesticides – saving you money
- **Saves you and/or your town money** since the material is removed from the waste stream
- **Reduces the methane emissions** from landfilling food scraps (methane is a potent greenhouse gas)
- **Eliminates the need to store and transport your food scraps** to a compost collection facility (if one exists)
- **Provides an option** when a local collection facility is not available

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Where Can I Buy Home Composting Supplies?

Locally:

Online:

- **Compost Bins & Tumblers:** Gardener's Supply (www.gardeners.com) & many other web sites
- **Wire Mesh Cylinder Kits:** Brooks Trap Mill (www.brookstrapmill.com or (800) 426-4526)
- **Solar Composters:** Green Cone (www.greenconeusa.com) & Algreen (www.algreenproducts.com) are the most popular brands
- **Vermicomposting:** Several options, including: RedWorms for a Green Earth (https://redworms-greenearth.com) & Worm Mainea (wormmainea.com)
- **Bokashi Composter:** http://thebokashibucket.com

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Available at: https://www.newmoa.org/keep-food-out-of-landfills-composting-food-waste/

8-page Guide

Choosing a Compost System

There are several options to choose from when deciding how to set up a home composting system.

TYPE OF COMPOST CONTAINERS		BENEFITS	CHALLENGES
No Bin (static compost pile/heap) Helpful hints available at:		Least expensive and least amount of effort	Can be messy if material is not properly contained Can attract animals and other pests because it is open – don't set up the pile close to your home Requires more space than other options Can take longer to produce finished compost
Do-It-Yourself Bin/Box or Wire Mesh Cylinder Directions for a three-bin system are available at:		Numerous material and design options – many are less expensive than purchasing a pre-fabricated composter Provides good air flow. Reduces problems with animals when a wire mesh base and cover are used A three-bin system allows sorting and separating of compost at various stages so that you can use some of it quicker	Can be time consuming to purchase materials and construct Requires stirring and mixing to make good compost A three-bin system takes up more space than other designs
Compost Bin (pre-fabricated, usually with a cover)		Options are relatively inexpensive and widely available online and at garden centers and hardware stores	Has a fixed capacity – depending on the quantity of food waste you generate, you might need to use two Requires stirring and mixing to bring enough air into the pile
Compost Tumbler (a barrel shaped bin mounted on a stand and usually fitted with a crank for turning)		Available online and at local garden centers and hardware stores Reduces/eliminates problems with animals and other pests because it is off the ground	Cost can vary widely depending on the style and size Requires rotating the tumbler, which can be difficult if the system retains moisture and gets heavy or freezes in the winter Has a fixed capacity – depending on the quantity of food waste you generate, you might need to use two

TYPE OF COMPOST CONTAINERS		BENEFITS	CHALLENGES
Solar Digestor (a unit with a basket installed below the ground surface and a two-walled component above ground that takes advantage of sunlight to provide heat) Information online, including at:		Efficiently breaks down food scraps, even meat and bones Designed to be animal-proof Low maintenance – no turning or mixing required	Does not take yard waste Does not produce compost or any usable by-product May be more expensive to purchase than other compost bin systems Requires installation in well-drained soils in a relatively sunny location
Vermicomposting (composting with worms) Information online, including at:		A great option for indoor composting Small size – can set up in a closet or in the basement Worms speed up the decomposition of organic materials Creates a compost richer in nutrients that helps improve a soils' biological, chemical, and physical properties more than other composts Minimal odor	Requires "Red Wiggler" worms that you can order online Not appropriate for outdoor use – the worms can only stay alive in temps ranging between 50-80 degrees F Worms are sensitive to moisture and ventilation changes and require some maintenance Some people don't like handling worms
Bokashi Composter (a sealable 5-gallon bucket with a packet of "Bokashi" mix containing anaerobic microbes) – is a fermentation process, not true composting Information online, including at:		Another indoor option Breaks down everything including meat, bones, dairy, and greasy/oily foods Decomposition is fast (typically 10-14 days) Fits in small spaces Minimal odor (air-tight)	Produces an acidic "pre-compost" that needs further curing – can add to a regular compost pile or mix with soil and let sit outside for 2 weeks before using Requires ongoing purchases of the "Bokashi" mix Once bucket is full, it needs to sit unopened for 10-14 days, so multiple units are needed

Donation Handout

FOOD RECOVERY & DONATION MADE EASY

Food waste makes up more than 20 percent of our trash – over 38 million tons in the U.S. each year. What's worse – much of that food is edible and could feed people in need. In the U.S., over 15 percent of households struggle with food insecurity. When you donate food, you can help feed people in your community and you can save money.

Why Donate Food?

- Helps families in need
- Reduces waste disposal costs since food is diverted from the landfill or compost facility
- Provides tax deductions for businesses that donate food to 501c3 non-profit organizations

Preparing Donated Food

As you prepare a food donation, remember that it is for people to eat and needs to be handled accordingly. This includes following temperature and storage guidelines – these differ depending on the type of food. For example, prepared food needs to be labeled and kept in protective packages, covered containers, or wrappings without any rips, tears, bulges, or leaks. Guidance is available at: www.foodprotect.org/media/guide/comprehensive-resource-for-food-recovery-2016-version.pdf (Appendix A is particularly relevant)

Donors Are Protected from Liability

The *Bill Emerson Good Samaritan Food Donation Act* was passed by the U.S. Congress in 1996 and provides federal liability protection for the donation of food that was properly handled and stored before donation. Under this Act, as long as the donor has not acted with negligence or intentional misconduct, they are not liable for damage or illness.

More Information:

- **EPA:** www.epa.gov/sustainable-management-food/reduce-wasted-food-feeding-hungry-people
- **Harvard Food Law and Policy Clinic:** www.chlpi.org/food-law-and-policy/about/

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What Foods Can I Donate? Many types of food can be donated, as shown in this summary of donation guidelines developed by Feeding America.

TYPE OF PRODUCT	HANDLING & STORAGE REQUIREMENTS	CODE DATE REQUIREMENTS
Prepared meals (e.g., large pans or individual portions of a cooked meal, soup, and baked goods)	Food can never have left the kitchen or have been served to the public. Thawed meals must be refrigerated at 41° F or below and frozen meals must be kept at 0° F or below	Frozen meals can be donated within 3 months of being frozen, thawed meals must be donated within 3 days, and baked goods within 3-5 days
Packaged meats	Meat must be frozen at 0° F or below	Must be frozen on or before the code date and donated within 3 months after the date it was frozen
Perishable goods (e.g., dairy and produce like fruits and vegetables)	Dairy and pre-cut produce need to be refrigerated at all times at 41° F or below. Whole produce should be stored in a cool, dry area	Produce must be in edible condition – no mold. Liquid dairy, (e.g., milk) must be donated before the date code. Other dairy products (e.g., cheese and yogurt) can be donated up to 7 days past the date code
Non-perishable items (e.g., canned/jarred goods, and packaged dry goods like crackers and cereal)	Stored in original containers off the floor	Must be donated within 30 days after the code date

Note: If food looks or smells bad, is moldy, or has damaged packaging – do not donate it. Much of it can be composted – so don't throw it out. For composting questions, contact or check out NEWMOA's composting documents available at: www.newmoa.org/solidwaste/projects/food/publications.cfm

Local Donation Options: (always call first to make sure they can accept what you have)

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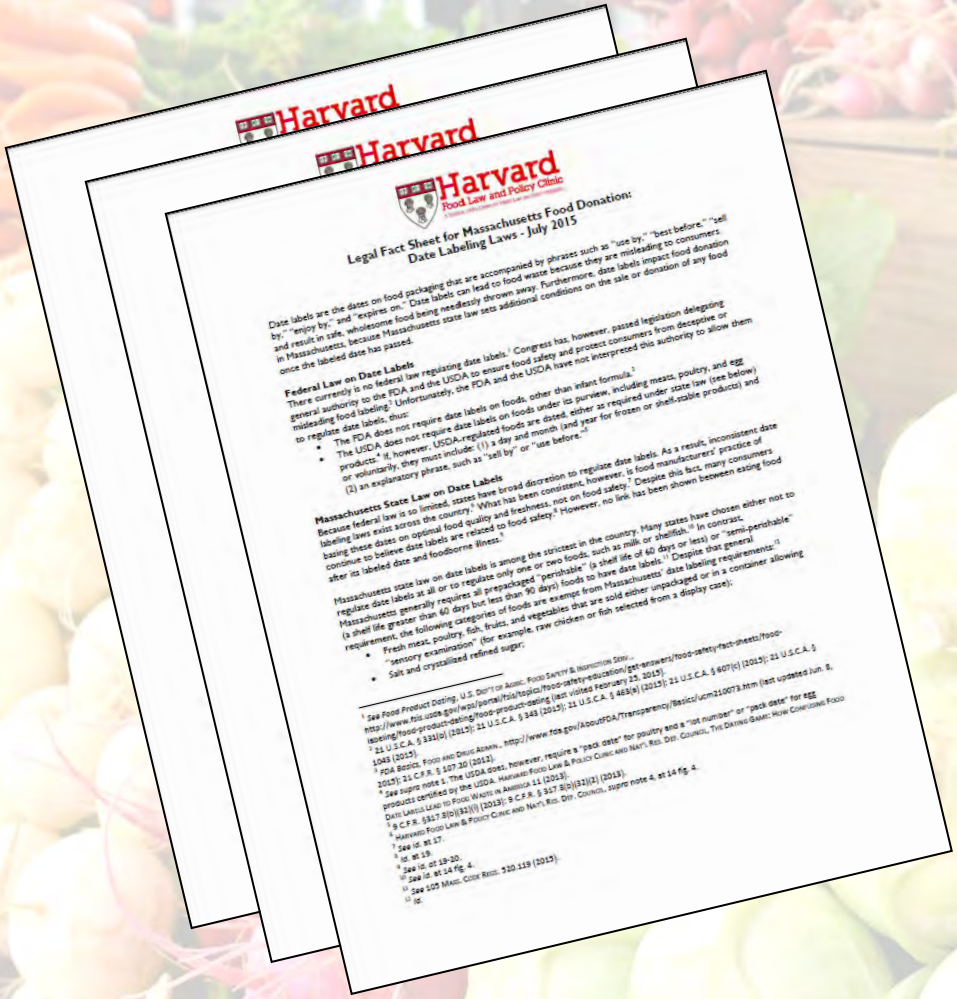
Available at: https://www.newmoa.org/keep-food-out-of-landfills-food-recovery-donation/

Best Practices for Diverting Food for Donation



Legal Fact Sheets:

- Date Labels
- Tax Incentives
- Liability Protections
- Animal Feed

15 states including: CT, ME, MA, NH, NJ, NY, RI & VT

SLIDE FROM HARVARD FOOD LAW AND POLICY CLINIC
Fact sheets available at: https://chlpi.org/project/state-specific-food-waste-fact-sheets/

USDA Project

(2016-2017)

Transfer Station Safety & Reducing Waste Disposal

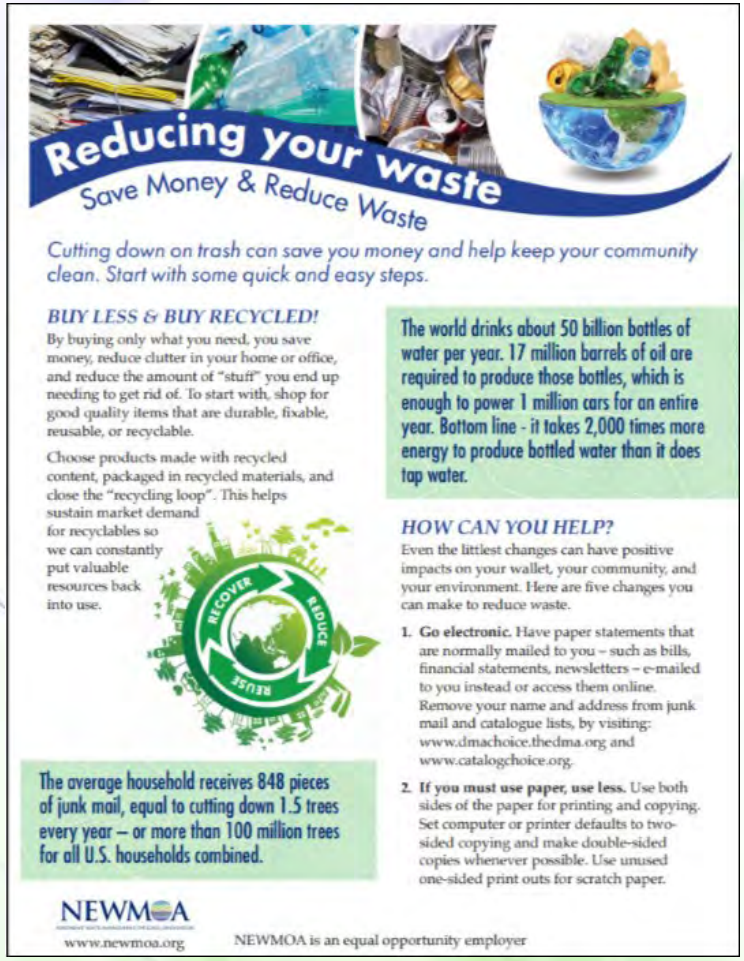
Improving Safety at Rural TS

- Project Partners: NEKWMD & North Country Council (NH)
- Visited 8 transfer stations in rural NH & VT
- Workshops in NH & VT:
  - Presentations at:
    - North Country Council (NH): https://www.newmoa.org/wp-content/uploads/2022/07/NH_July2017.pdf
    - NEKWMD: https://www.newmoa.org/wp-content/uploads/2022/07/VT_Aug2017.pdf
  - State OSHAs & municipal insurers participated
- End-of-Project Webinar:
  - Slides & recording on the Project page at: https://www.newmoa.org/projects/transfer-stations-improving-safety-reducing-waste/
  - **Recording might be a good training resource**

Reducing Waste Disposal

- Focus on communicating with public
  - 5 handouts & accompanying posters
    - ❖ Reducing Your Waste
    - ❖ The Benefits of Reuse…
    - ❖ WHY Recycle…
    - ❖ Recycle Right!
    - ❖ Don't Trash That!
- Workshops in NH & VT:
  - NH presentation at: https://www.newmoa.org/wp-content/uploads/2022/07/NH_Sept2017.pdf
- End-of-Project Webinar:
  - Slides & recording on the Project page at: https://www.newmoa.org/projects/transfer-stations-improving-safety-reducing-waste/

Reduce Handout



Reducing your waste

Save Money & Reduce Waste

Cutting down on trash can save you money and help keep your community clean. Start with some quick and easy steps.

BUY LESS & BUY RECYCLED!

By buying only what you need, you save money, reduce clutter in your home or office, and reduce the amount of "stuff" you end up needing to get rid of. To start with, shop for good quality items that are durable, fixable, reusable, or recyclable.

Choose products made with recycled content, packaged in recycled materials, and close the "recycling loop". This helps sustain market demand for recyclables so we can constantly put valuable resources back into use.

The world drinks about 50 billion bottles of water per year. 17 million barrels of oil are required to produce those bottles, which is enough to power 1 million cars for an entire year. Bottom line - it takes 2,000 times more energy to produce bottled water than it does tap water.

HOW CAN YOU HELP?

Even the littlest changes can have positive impacts on your wallet, your community, and your environment. Here are five changes you can make to reduce waste.

1. **Go electronic.** Have paper statements that are normally mailed to you – such as bills, financial statements, newsletters – e-mailed to you instead or access them online. Remove your name and address from junk mail and catalogue lists, by visiting: www.dmachoice.thedma.org and www.catalogchoice.org.
2. **If you must use paper, use less.** Use both sides of the paper for printing and copying. Set computer or printer defaults to two-sided copying and make double-sided copies whenever possible. Use unused one-sided print outs for scratch paper.
3. **Limit single-use items.** Avoid buying or using disposable items. Make sure to pack lunches in reusable bags and containers. Use reusable plates, cups, and utensils instead of disposable paper or plastic versions. Use cloth napkins and towels instead of paper products.
4. **Shop smart.** Bring a reusable bag when shopping. If you forget, ask for paper, and pack as many goods in one bag as possible, without double bagging. Also, reduce the amount of packaging by buying products in bulk. Look for products that are packaged in cardboard or paper board instead of plastic and Styrofoam™.
5. **Gift green.** When wrapping presents, choose reusable gift bags instead of wrapping paper. Reuse wrapping paper you receive or create a homemade version using left-over fabric tied with ribbon or string.

The average household receives 848 pieces of junk mail, equal to cutting down 1.5 trees every year – or more than 100 million trees for all U.S. households combined.

An average roll of paper towels costs about $1.40 for 120 sheets, or a little more than 1¢ per paper towel. A family of four can easily spend 84¢ per week, or about $44 per year. Although cloth napkins and towels have higher upfront costs, they can save you hundreds of dollars over their lifetime.

Waste Reduction Resources:

There are hundreds of other easy ways to cut down on trash. Check out these useful web resources for suggestions:

- ReThink Recycling: www.rethinkrecycling.com/residents/reduce/top-10-ways-reduce-waste
- Green Choices: www.greenchoices.org/green-living/waste-recycling/waste-reduction
- Global Stewards: www.globalstewards.org/ecotips.htm
- Eco-Cycle: www.ecocycle.org/ecoliving
- Greatist: http://greatist.com/happiness/eco-friendly-tips-save-cash

This handout focuses on the importance of Reducing Waste. It is one in a series developed for rural transfer stations to improve safety and promote waste reduction. For additional documents visit: www.newmoa.org/solidwaste/projects/transferstations/publications.cfm.

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https://www.newmoa.org/wp-content/uploads/2022/07/Reducing_Waste.pdf

Reuse Handout

The Benefits of REUSE...

Instead of discarding items you no longer want or need, consider whether they can be reused. Reuse is different from recycling. When you "reuse" an item, you keep it whole or intact, and then sell or donate it for use again.

Reuse has many benefits, including:

- Saving money on disposal costs
- Conserving natural resources, energy, and raw materials
- Returning products and materials back into the economy and fostering job creation
- Helping people who need the item but cannot afford to buy it new

THINK BEFORE YOU BUY

By buying only what you need, you save money, reduce clutter in your home or office, and reduce the amount of "stuff" that you need to get rid of. Look for good quality items that are durable, fixable, reusable, or recyclable.

Benefits of Donation Include:

- Your donations are tax deductible
- Provides items for people in need
- One person's trash is another's treasure

DONATE GOOD QUALITY ITEMS

If the item is in good condition – donate it! Many charities and social programs accept good condition items for donation. Some operate second-hand shops and will re-sell your donated items to generate income to fund the non-profit organization's mission. Others pass the items on directly to those people most in need, which could be in your community or in underdeveloped countries around the globe.

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REFURBISH, REMANUFACTURE, REBUILD, & RENOVATE

Some items not suitable for donation or re-sale, may be repaired or restored. *"Refurbishing, remanufacturing, rebuilding, or renovating"* means some or all components of the item are removed, repaired, and/or replaced.

You can look for Do-It-Yourself (DIY) tutorials on the internet or find inspiration through community Facebook pages, YouTube videos, and Pinterest boards.

There are many examples of "fix-it clinics" or "repair cafes" in communities across the country. At these types of events, residents bring in items such as small household appliances, clothing, and electronics, and receive free guided assistance from skilled volunteers to disassemble, troubleshoot, and fix their items. For more information, visit: http://repaircafe.org/en/.

Benefits of a Fix-It Clinic Include:

- Items are fixed for FREE (except the costs of any new replacement parts)
- Customers learn valuable new repair skills
- Connections are built within the community
- The amount of repairable items thrown in the trash is reduced

Local Reuse Options:

You can always gift or re-sell good quality used items to friends and family, or through yard sales or online exchanges. Or bring your items to local reuse or donation centers. Always call first to confirm they can accept the items you have.

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STORE YOUR UNWANTED ITEMS SO THEY CAN BE REUSED

If you have good quality items you no longer want or need, consider whether someone else might find them useful. To keep them in good condition for the next person, make sure to properly store them. For example, you might have a piece of furniture you don't need so you put it outside by the road, hoping that someone will drive by and pick it up. The problem is, if nobody picks it up right away, and the furniture is left exposed to the elements, it can get ruined and then be of no use to anyone.

This handout focuses on the importance of **Reuse**. *It is one in a series developed for rural transfer stations to improve safety and promote waste reduction. For additional documents visit: www.newmoa.org/solidwaste/projects/transferstations/publications.cfm*

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Published June 2017

Template version that anyone can customize for their local area:
https://www.newmoa.org/wp-content/uploads/2022/07/Reuse_Template.pdf

Recycle Handout

WHY Recycle...
in the Northeast Kingdom of Vermont

IT'S GOOD FOR YOU

When you recycle, you can be proud that you are saving money and reducing waste. Recycling helps to make our earth a cleaner and healthier place to live. It is one of the easiest ways you can have a positive impact on the environment.

Recycling helps you be more aware of how you use products and dispose of waste. Studies show that people who recycle save money because they cut down on buying unnecessary items. They instinctively think of what to do with the packaging or the product before buying it.

- Is the item and package easy to recycle?
- Does my recycling center accept this material?
- Can I purchase this same item in used condition or possibly borrow it for free?

Recycling five #1 labeled (PET) plastic bottles generates enough fiber to make one ski jacket.

IT'S GOOD FOR YOUR COMMUNITY

By recycling, communities:

- Save money on disposal costs
- Conserve natural resources, energy, and raw materials
- Return products and materials back into the economy and foster job creation

When you put your paper, plastics, glass and so on in the recycling bins, the contents are collected and either baled at the transfer station or picked up and combined with the same items from other transfer stations. They are sold through material brokers or directly to end users for recycling. Bottom line, recycling creates jobs – the labor involved in the logistics and processing of recycling streams is more than the labor needed to dispose of the waste.

Recycling 10,000 tons of waste creates 36 jobs! Incinerating the same amount of waste creates 1 job, and landfilling it creates only 6 jobs.

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IT'S GOOD FOR THE WORLD

Improperly discarded trash has a negative impact on the natural environment. It can pollute waterways and roadways, and harms wildlife. By recycling, you can help your community be cleaner and healthier.

A recyclable product is something that can be turned back into a raw form and used to create a new version or completely different product. This reduces the amount of materials to make the new item and the energy and other resources that go into raw materials extraction, transportation, and processing.

Recycling 1 ton of paper saves 17 trees, 7,000 gallons of water, 3 cubic yards of landfill space, and 2 barrels of oil.

IT'S THE LAW

There are six materials that MUST be recycled by all households in Vermont, including:

- Aluminum cans, pie plates, and foil
- Steel cans
- Glass bottles and jars from food and beverages
- Corrugated cardboard
- Paper – including white and colored paper, newspaper, magazine, catalogues, paper mail and envelopes, boxboard, and paper bags
- Hard plastics – specifically PET (#1) and HDPE (#2) plastic bottles and jugs

Many towns recycle more items than these. Visit www.nekwmd.org/towns.html for information about the recyclables collected at your local facility.

Every 1 pound of recycled #1 (PET) plastic used in place of virgin material reduces the energy consumed during production by 84%.

Recycling Saves Money

Municipalities in Vermont are required to implement a "variable rate pricing system", also known as Pay-As-You-Throw (PAYT) for the collection of solid waste.

Basically, the town or hauler charges residents for trash disposal based on the amount they throw away. The key component of Vermont's law is that facilities that manage trash, including transfer stations, must also offer recycling and cannot charge a separate fee for it.

By making sure that you separate recyclable materials instead of combining them with your normal trash, you SAVE money on trash disposal.

In the U.S., waste disposal costs communities an average of $70 to more than $200 per ton… compared to recycling program costs of just $50 to $150 per ton.

Recycling 1 aluminum can saves enough energy to power a TV for 3 hours.

This handout focuses on the importance of ***Recycling****. It is one in a series developed for rural transfer stations to improve safety and promote waste reduction. For additional documents visit: www.newmoa.org/solidwaste/projects/transferstations/publications.cfm.*

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Published May 2017

Template version that anyone can customize for their local area:
https://www.newmoa.org/wp-content/uploads/2022/07/WHY_Recycle_Template.pdf

Self-Sort Drop-Off

Recycle Right!

At Self-sort Recycling Drop-off Centers

Recycling is great, but it's important to do it correctly. The top five items that cause the most frequent problems at recycling drop-off centers are listed below. **Please do not put these in the recycling:**

STYROFOAM™

PAPER TOWELS, NAPKINS, TISSUES

COATED PAPER CONTAINERS

PLANTING POTS & TRAYS

MEDICAL WASTE

WHEN RECYCLING IS DONE RIGHT, YOUR TOWN GENERATES PRODUCTS THAT OTHERS WANT TO BUY

CONSIDER RECYCLABILITY AT THE POINT OF PURCHASE

Did You Know?

Your transfer station attendant is there to help. They know what can and cannot be recycled and what to put where. Please cooperate with their instructions.

What Can You Do?

NEWMOA

https://www.newmoa.org/wp-content/uploads/2022/07/Recycle_Right.pdf

Not in the Trash

Don't Trash That!

In the Northeast Kingdom of Vermont

Some things should not go in your trash because they are ***a safety hazard*** *to workers and others at the transfer station.*

Please do not put these in the trash:

CHEMICALS, PESTICIDES, USED OIL, PAINT, AND OTHER HOUSEHOLD HAZARDOUS WASTES (HHW)

Why Not?
- These materials can create a safety hazard for workers at the transfer station
- Leaks and spills can contaminate soil and water

Instead:
- Store carefully at home and bring to a HHW event; visit: http://nekwmd.org/calendar.html
- Many transfer stations collect used oil - ask the attendant
- Several locations in the Northeast Kingdom collect paint and related waste for free; find locations at: www.paintcare.org/paintcare-states/vermont/#/everyone

AMMUNITION, FLARES, FIREWORKS

Why Not?
- These materials can create a safety hazard for workers at the transfer station

Instead:
- Contact your local police or fire department and follow their instructions

METAL OBJECTS

All type/sizes – including propane tanks

Why Not?
- Propane tanks of all sizes, even when empty present a safety hazard
- The transfer station generates income from selling scrap metal in bulk for recycling

Instead:
- Ask the transfer station attendant where to put propane tanks
- Put metal objects in the designated scrap metal collection area
- Put metal food & drink cans in their regular recycling bins

LIQUIDS

All types

Why Not?
- Liquids make a mess at the transfer station; attract bees, rats, and other pests; and cause odors
- Disposing of liquids in the trash is illegal in Vermont

Instead:
- If the liquid is from food/beverage, simply empty containers before disposal
- If the liquid is from chemicals, pesticides, used oil, paint, or other HHW – don't empty! Follow the HHW instructions above

All Vermont communities have unit-based pricing for trash (also known as pay-as-you-throw or PAYT) so the more you throw out, the more you pay. Disposing of items that should not be included in the trash ends up costing you money.

NEWMOA is an equal opportunity provider and employer

Some things should not go in the trash because there are better things to do with them. ***Please do not put these in the trash:***

RECYCLABLES

Including: paper, some plastics, and containers made of aluminum, steel, and glass

Why Not?
- Disposal of mandated recyclables is illegal in Vermont
- Any needless disposal costs you money

Instead:
- Bring to the recycling center

FOOD WASTE

Why Not?
- Food waste is nutrient rich and can be composted to make a natural fertilizer for farms and gardens
- Any needless disposal costs you money

Instead:
- Consider backyard composting at home
- Bring to the organics collection container at your transfer station

IT'S THE LAW - NO RECYCLABLES IN THE TRASH!

There are six materials that MUST be recycled by all households in Vermont, including:

- Aluminum cans, pie plates, and foil
- Steel cans
- Glass bottles and jars from food and beverages
- Corrugated cardboard
- Paper – including white and colored paper, newspaper, magazine, catalogues, paper mail and envelopes, boxboard, and paper bags
- Hard plastics – specifically PET (#1) and HDPE (#2) plastic bottles and jugs

Many towns recycle more items than these. Visit www.nekwmd.org/towns.html for information about the recyclables collected at your local facility.

This handout is focused on Don't Trash That, or what not to put in your trash. It is one in a series developed for rural transfer stations to improve safety and promote waste reduction. For additional documents visit: www.newmoa.org/solidwaste/projects/transferstations/publications.cfm.

OTHER ITEMS BANNED FROM DISPOSAL

Vermont also bans the following materials from disposal. These items should be managed separately. Most are collected at most transfer stations. Visit www.nekwmd.org/towns.html for information about the special wastes collected at your local facility.

- Lead acid batteries
- Waste oil and filters
- White goods (e.g., refrigerators, washing machines, and other major appliances)
- Tires
- Paint, stain, varnish, and thinner
- Nickel-cadmium batteries
- Mercury-added products (e.g. thermostats, thermometers, and CFLs)
- Electronic devices
- Mandated recyclable materials (see list)
- Leaf and yard waste
- Food waste (effective July 1, 2020)

NEWMOA
www.newmoa.org

NEKWMD
www.nekwmd.org

This material is based on work supported by the Rural Utilities Services, United States Department of Agriculture. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the official views of the Rural Utilities Services. Mention of any organization or company name is not considered an endorsement by NEWMOA, NEWMOA-member states, or the USDA. The views expressed in this document do not necessarily reflect those of NEWMOA, USDA, the Project Partners, or the NEWMOA-member states.

Published July 2017

Template version available

https://www.newmoa.org/wp-content/uploads/2022/07/Not_Trash_Template.pdf

USDA Project

(2015-2016)

Bulky Waste

Bulky Waste Project

- Partners: NEKWMD, Central Vermont WMD, and 2 locations in MA (Franklin County & Central Mass Communities)
- Visited MA transfer stations & bulky waste collection event in NEKWMD
- Reuse & recycling brochures:
  - Mattresses
  - Furniture
  - Carpet
  - Large plastics
- Fact sheets for the public on options in their location
- Workshops in MA & VT
- End of project national webinar slides (https://www.newmoa.org/wp-content/uploads/2022/07/BulkyWasteWebinarDec2016.pdf) & recording (https://www.youtube.com/watch?v=aWRbUdell94)
- Project website: https://www.newmoa.org/projects/bulky-waste/

Bulky Waste Resources

4 brochures with detail: furniture, mattresses, carpet, & large rigid plastics

Handout for the public with local information

REUSING AND RECYCLING

CARPET in Rural Communities

This guide is designed to help local government officials in rural communities better understand the options available for reusing and recycling carpet. It is one of a series of guidance documents developed by NEWMOA to help rural communities consider options for managing bulky wastes and diverting them from landfill disposal. The other best practice documents focus on **furniture, mattresses,** and **large rigid plastic items** and are available at: www.newmoa.org/solidwaste/projects/bulky.

Unwanted carpet is difficult to handle and transport and consumes increasingly scarce landfill space. Disposing of carpet is challenging for homeowners and expensive for local waste authorities, particularly in rural communities. Some of what is thrown away might be reusable or contain materials that, through

Benefits of Reusing & Recycling Carpet

Municipalities and tax payers benefit from reuse and recycling of carpet by:

- Saving money on landfill disposal costs
- Conserving energy and raw materials
- Returning products and materials back into the economy and fostering job creation
- Helping people who can use an area rug but cannot afford to buy new

Furniture & Carpet Disposal

An example of current fees for disposal

REUSING AND RECYCLING

FURNITURE in Rural Communities

This guide is designed to help local government officials in rural communities better understand the options available for reusing and recycling furniture. It is one of a series of guidance documents developed by NEWMOA to help rural communities develop strategies for managing bulky wastes and diverting them from landfill disposal. The other best practice documents focus on **mattresses, carpet,** and **large rigid plastic items** and are available at: www.newmoa.org/solidwaste/projects/bulky.

Discarded furniture is difficult to handle and transport and consumes increasingly scarce landfill space. Disposing of furniture items is challenging for homeowners and expensive for local waste authorities, particularly in rural communities. Some of what is thrown away might be reusable or contain materials that, through recycling, can replace virgin material in the manufacturing of new products reducing their carbon footprint and overall environmental impact.

Disposal Alternatives:

- Reuse – the item is kept "whole" and is sold or donated for use again
- Refurbish/Remanufacture/Rebuild/Renovate – some or all components are removed and replaced
- Recycle – the item is separated into its components that are then processed and used to create new products

Benefits

Municipalities and tax payers benefit from reuse and recycling of furniture by:

- Saving money on landfill disposal costs
- Conserving energy and raw materials
- Returning products and materials back into the economy and fostering job creation
- Helping people who need furniture but cannot afford to buy it new

Segregated furniture at a transfer station

Furniture generally includes large household items made from metal, plastic (e.g., patio or garden furniture), and/or wood. Some furniture is upholstered. This document focuses on wood and upholstered furniture, including couches, chairs, tables, bureaus, desks, and bedframes because this material presents significant opportunities for reuse and recycling. Metal recyclers value the steel, aluminum, and other materials in metal furniture, making them easily diverted from landfill disposal. Most municipal programs currently recycle these metal products. Guidance on reuse and recycling of plastic furniture is covered in a separate document that focuses on "Large Rigid Plastics Items".

Reuse

Furniture that is in good condition with no rips, stains, or broken pieces should be reused whenever possible. Communities can facilitate furniture reuse by promoting existing donation and resale options or by facilitating local swap opportunities. Many charities and non-profit organizations accept furniture in good condition for donation or re-sale, including Habitat for Humanity ReStores, Goodwill, Salvation Army, The Society of Saint Vincent de Paul, and other local social service agencies.

Consumers may be able to sell their used furniture directly through yard sales, estate sales, flea markets, or online exchanges, such as Craig's List (www.craigslist.org) or e-bay (www.ebay.com). Another resale option is antiques dealers, consignment stores, or

How Communities Can Facilitate Reuse

- Add containers at their transfer stations dedicated to specific charity organizations that will pick up when filled
- Add a swap shop at their transfer station (see page 3 for examples)
- Host a reuse event, such as a yard sale, swap, or zero waste event

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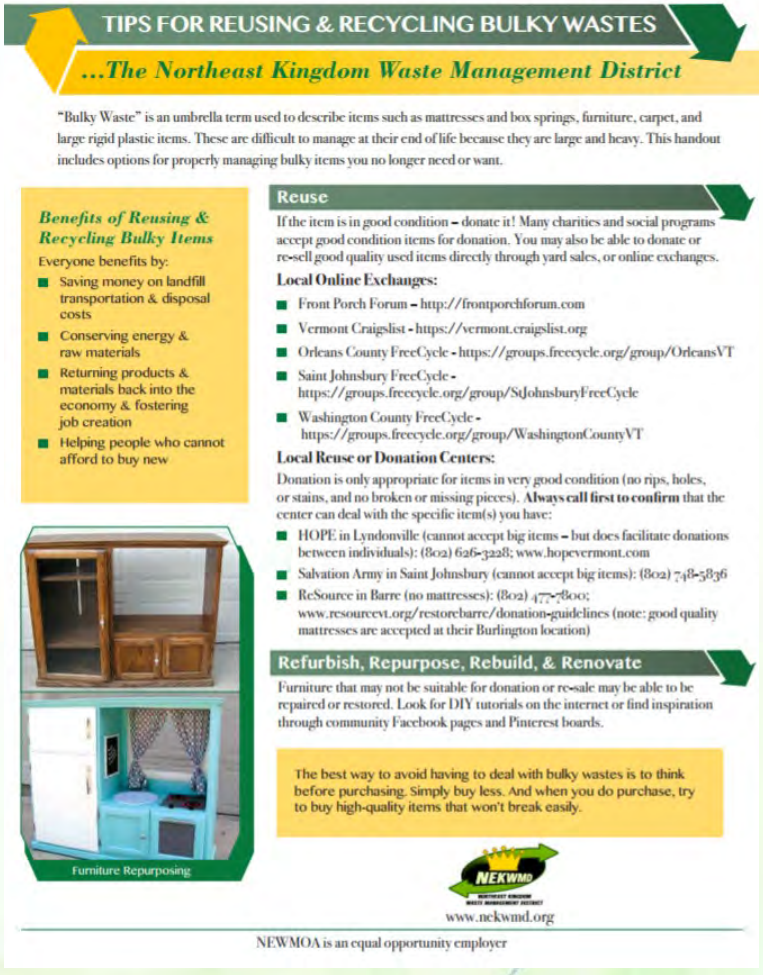

TIPS FOR REUSING & RECYCLING BULKY WASTES

...The Northeast Kingdom Waste Management District

"Bulky Waste" is an umbrella term used to describe items such as mattresses and box springs, furniture, carpet, and large rigid plastic items. These are difficult to manage at their end of life because they are large and heavy. This handout includes options for properly managing bulky items you no longer need or want.

Benefits of Reusing & Recycling Bulky Items

Everyone benefits by:

- Saving money on landfill transportation & disposal costs
- Conserving energy & raw materials
- Returning products & materials back into the economy & fostering job creation
- Helping people who cannot afford to buy new

Furniture Repurposing

Reuse

If the item is in good condition – donate it! Many charities and social programs accept good condition items for donation. You may also be able to donate or re-sell good quality used items directly through yard sales, or online exchanges.

Local Online Exchanges:

- Front Porch Forum – http://frontporchforum.com
- Vermont Craigslist - https://vermont.craigslist.org
- Orleans County FreeCycle - https://groups.freecycle.org/group/OrleansVT
- Saint Johnsbury FreeCycle - https://groups.freecycle.org/group/StJohnsburyFreeCycle
- Washington County FreeCycle - https://groups.freecycle.org/group/WashingtonCountyVT

Local Reuse or Donation Centers:

Donation is only appropriate for items in very good condition (no rips, holes, or stains, and no broken or missing pieces). **Always call first to confirm** that the center can deal with the specific item(s) you have:

- HOPE in Lyndonville (cannot accept big items – but does facilitate donations between individuals): (802) 626-3228; www.hopevermont.com
- Salvation Army in Saint Johnsbury (cannot accept big items): (802) 748-5836
- ReSource in Barre (no mattresses): (802) 477-7800; www.resourcevt.org/restorebarre/donation-guidelines (note: good quality mattresses are accepted at their Burlington location)

Refurbish, Repurpose, Rebuild, & Renovate

Furniture that may not be suitable for donation or re-sale may be able to be repaired or restored. Look for DIY tutorials on the internet or find inspiration through community Facebook pages and Pinterest boards.

The best way to avoid having to deal with bulky wastes is to think before purchasing. Simply buy less. And when you do purchase, try to buy high-quality items that won't break easily.

NEKWMD

www.nekwmd.org

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https://www.newmoa.org/projects/bulky-waste/

USDA Project

(2014-2015)

PAYT / SMART

(pay-as-you-throw /

save money and reduce trash)

PAYT Resources

Partners: NEKWMD, Windham County (VT), Upper Valley Lake Sunapee (NH)

https://www.newmoa.org/projects/smart/

- Case studies of 11 rural communities – some with before/after data
- 2-page handout for the public
- "Fair Pricing Strategies" 4-page brochure for "decision-makers" with case studies
- Workshops in NH & VT
- SMART Toolkit for Rural Communities - webpage compilation of resources
- End of project national webinar slides (https://www.newmoa.org/wp-content/uploads/2022/07/Fair-Pricing-Strategies-for-Trash-PAYT-Experience-in-Rural-Areas-New-Resources.pdf) & recording (https://www.youtube.com/watch?v=4tWw3gKW9JA)

SMART:
Communities Save Money & Reduce Trash

Many municipalities have traditionally used property taxes and/or a flat fee to fund the management of waste generated by residents. Save Money and Reduce Trash (SMART) programs are different; they charge residents for waste disposal based on the amount they throw away. This document describes the benefits of SMART and how it works.

Solid waste management is typically one of the highest cost items in a municipal budget. SMART is a proven system that saves municipalities money. How? SMART charges for disposal but not for recycling. It:

- **Reduces the amount of trash managed by about 40-55 percent** and saves money through the resulting reductions in hauling frequency and tipping fees
- Covers costs of trash and recycling management with income

SMART is flexible and communities use many variations. Municipalities can design a system that works for them. Overall, there are two main ways to implement SMART:

- Special bags or stickers: households must purchase and affix the stickers or use the bag for all their trash
  - Works easily with both transfer station and curbside pickup systems
  - Requires convenient locations to purchase the bags/stickers
  - Adds minimal administrative costs to manage the bags/stickers
- Containers: households are allowed one container per week of a certain size at a base price and pay more for larger or additional containers
  - Works best with curbside pick-up systems
  - Adds administrative costs to bill residents
  - Requires a system to manage additional volumes (e.g., purchase of special bag)

The key to SMART is charging a fee for waste that is disposed of, but not for recycling. Virtually all SMART communities set their base fee for a 32 gallon size bag/container. Many communities that use special bags set a lower fee for a smaller sized bag. Most communities that use containers also have the option to use 64 and 96 gallon containers at higher fees. In the northeast in 2014, the typical fee of $3 per 32 gallons covered most/all of the costs of recycling and waste management in the town budget (including labor).

SMART is fair for residents because they:

- **Pay only for the level of service needed**
- **Don't subsidize those that produce more trash**
- **Can choose to lower their costs by:**
  - Smart purchasing choices (i.e., buying products in less packaging)
  - Recycling and reusing
  - Composting kitchen scraps and yard waste

SMART also:

- **Holds the line on tax increases:** eliminates or significantly reduces the cost of waste services in a community's budget, enabling them to reduce their tax rate or allocate the savings to cover other expenses
- **Removes free-riders:** eliminates the incentive for non-residents to "smuggle" their trash into town to take advantage of "free" disposal so residents no longer pay to manage trash from non-residents
- **Provides freedom of choice:** no one has to change their waste habits, but many people may decide they would rather reuse and recycle than pay for disposal
- **Improves the environment and public health:** less waste goes to landfills and valuable resources are conserved through reuse, recycling, and composting

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Other Food Waste Projects:

- Onondaga County Resource Recovery Agency (OCRRA) in NY
- Erie County NY
- Anaerobic Digestion (AD)

End Food Waste Initiative in Onondaga County

Note: Jennifer initiated this project and then Krishana Abrahim-Petrie took over

Objectives & Targets

- Develop handouts and short videos to help residents understand what they can do to reduce food waste
- Educate on:
  - Better meal planning tips
  - Date label myths
- Target Audience: low-income residents, recent immigrants, and those that speak English as a second language
- Translated into 5 languages: Arabic, Nepali, Somali, Spanish, and Swahili

Resources

- Four handouts with recipes:
  - Plan Ahead
  - Understanding Date Labels
  - Use Everything
  - Eat Leftovers
- Exhibits at farmers markets, festivals, and other local events in the county
- Three animated videos highlighting handout topics and composting how-to

Resources

Handouts: https://ocrra.org/end-food-waste/

https://www.newmoa.org/solidwaste/projects/food/endfoodwaste.cfm

Videos: https://youtube.com/playlist?list=PL1Xsk8hS6kIL3ZTMrGvv0sDEeOHrqwB4V

Reducing Food Waste from Food Service Kitchens in Erie County

Project Partners

- The Erie County Department of Environment & Planning
- Metz Culinary Management – food service provider at health care facilities
- Leanpath – food waste data collection & visualization tool

Project Activities

- Visited 4 healthcare facilities in Buffalo, NY area
- *Reducing Food Waste from Commercial Food Service Kitchens in Erie County* guide (December 2023 – 8 pages)
- Case study write-up, *Reducing Food Waste at Health Care Facilities in Erie County* (December 2023 – 12 pages)
- Outreach presentations:
  - Case study focus: NYSAR3 - November 2023
  - Reducing food waste focus: Roswell Park Cancer Institute & Buffalo Niagara Medical Campus - December 2023
  - Project end webinar - December 2023
- Project webpage: https://www.newmoa.org/projects/food-waste-reduction-in-erie-county-ny/

The Project's Four Healthcare Settings

01

Small Hospital

Millard Filmore Suburban (MFS)

01

Assisted Living and Rehab Facility

HighPointe on Michigan (HPM)

02

Large Hospitals

- Erie County Medical Center (ECMC)
- Buffalo General Medical Center (BGMC)

(ECMC & BGMC each have 2 Leanpath systems)

Timeline

2021

Spring:
Leanpath scales installed & baseline data established
Fall: project put on hold

1

2022

Project on hold:
Healthcare facilities retail cafeterias reopen to the public

2

2023

January: Project restarts
July:
Categorizations edited in Leanpath system

3

2023

Data analyzed & recommendations provided
Case study written

4

Guide:
Reducing Food Waste from Food Service Kitchens

Available at: https://www.newmoa.org/wp-content/uploads/2023/12/Guide_FoodServiceKitchens_FINAL.pdf

Reducing Food Waste from Food Service Kitchens *in Erie County*

Numerous waste characterization studies show that over 20 percent of trash is food waste[1]. This wasted food – and wasted money - is just part of the story. All of the resources (land, water, energy, labor, manufacturing, packaging, transportation) and all of the associated greenhouse gas emissions that went into growing the food and getting it to the customer are also wasted.

Decreasing the volume of wasted food and preventing it from entering the landfill are important for the development of sustainable food systems, conservation of environmental resources, and reduction of greenhouse gas emissions. This guide is focused on reducing food waste at food service kitchens, such as restaurants, health care facilities, schools, catering providers, and other similar operations.

FOOD WASTE IN FOOD SERVICE KITCHENS

Food waste from a kitchen is typically caused by overproduction and spoilage, along with over-ordering, equipment malfunction, and quality problems. Food waste costs a facility real money because of:

- **Food purchases** – money spent on food that is not eaten
- **Wasted labor** – staff spend time preparing food that gets thrown away
- **Disposal fees** – larger payments to haul away food waste
- **Energy costs** – increased electric, gas and water use to prepare food that is wasted

Waste prevention saves $$$ - by reducing purchasing, labor, and disposal costs!

FOOD WASTE MANAGEMENT HIERARCHY

The US EPA published a Wasted Food Scale for management of excess food as shown in **Figure 1**. Prevent Wasted Food (also known as "Source Reduction") has the largest impact on food waste management because it provides critical social and environmental benefits:

- Prevents excess greenhouse gas emissions
- Avoids unnecessary resource use
- Protects nutrition loss

Food that was not used for its intended purpose can be managed in a variety of ways:

- Donation to feed people
- Recycling through:
  - Creation of animal feed
  - Anaerobic Digestion (AD)
  - Composting

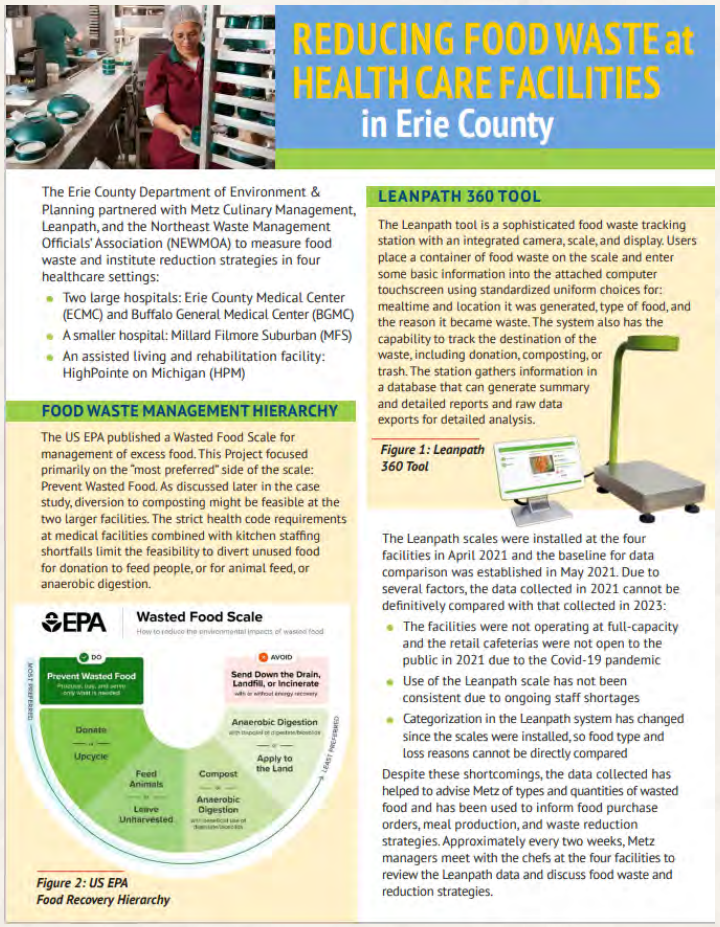
Each of these strategies is discussed further in the following sections.

Figure 1: US EPA
US EPA Wasted Food Scale

1. New York City: https://dsny.cityofnewyork.us/wp-content/uploads/2018/04/2017-Waste-Characterization-Study.pdf; Maine: https://umaine.edu/wp-content/uploads/sites/2/2017/04/2011-Maine-Residential-Waste-Characterization-Study.pdf; Vermont: https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/2018-VT-Waste-Characterization.pdf

Case Study:
Food Waste at Health Care Facilities in Erie County

Available at: https://www.newmoa.org/wp-content/uploads/2023/12/EC_FoodWaste_CaseStudy.pdf



REDUCING FOOD WASTE at HEALTH CARE FACILITIES in Erie County

The Erie County Department of Environment & Planning partnered with Metz Culinary Management, Leanpath, and the Northeast Waste Management Officials' Association (NEWMOA) to measure food waste and institute reduction strategies in four healthcare settings:

- Two large hospitals: Erie County Medical Center (ECMC) and Buffalo General Medical Center (BGMC)
- A smaller hospital: Millard Filmore Suburban (MFS)
- An assisted living and rehabilitation facility: HighPointe on Michigan (HPM)

FOOD WASTE MANAGEMENT HIERARCHY

The US EPA published a Wasted Food Scale for management of excess food. This Project focused primarily on the "most preferred" side of the scale: Prevent Wasted Food. As discussed later in the case study, diversion to composting might be feasible at the two larger facilities. The strict health code requirements at medical facilities combined with kitchen staffing shortfalls limit the feasibility to divert unused food for donation to feed people, or for animal feed, or anaerobic digestion.

Figure 2: US EPA Food Recovery Hierarchy

LEANPATH 360 TOOL

The Leanpath tool is a sophisticated food waste tracking station with an integrated camera, scale, and display. Users place a container of food waste on the scale and enter some basic information into the attached computer touchscreen using standardized uniform choices for: mealtime and location it was generated, type of food, and the reason it became waste. The system also has the capability to track the destination of the waste, including donation, composting, or trash. The station gathers information in a database that can generate summary and detailed reports and raw data exports for detailed analysis.

Figure 1: Leanpath 360 Tool

The Leanpath scales were installed at the four facilities in April 2021 and the baseline for data comparison was established in May 2021. Due to several factors, the data collected in 2021 cannot be definitively compared with that collected in 2023:

- The facilities were not operating at full-capacity and the retail cafeterias were not open to the public in 2021 due to the Covid-19 pandemic
- Use of the Leanpath scale has not been consistent due to ongoing staff shortages
- Categorization in the Leanpath system has changed since the scales were installed, so food type and loss reasons cannot be directly compared

Despite these shortcomings, the data collected has helped to advise Metz of types and quantities of wasted food and has been used to inform food purchase orders, meal production, and waste reduction strategies. Approximately every two weeks, Metz managers meet with the chefs at the four facilities to review the Leanpath data and discuss food waste and reduction strategies.

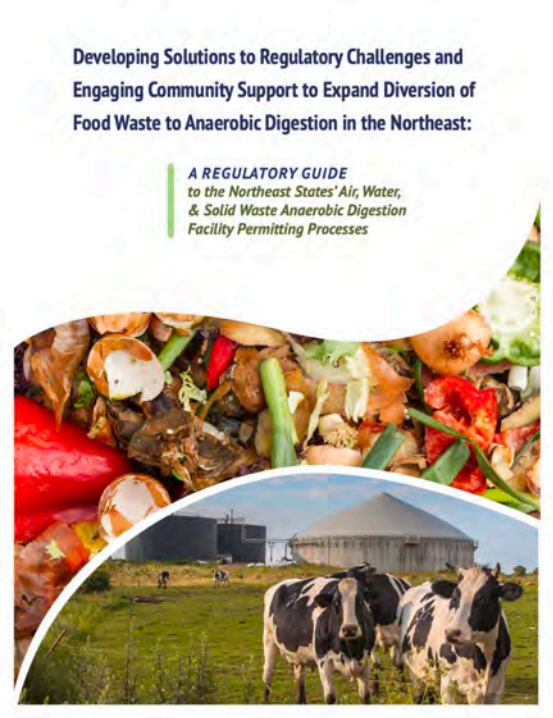
EPA Project
(2022-2024)
Anaerobic Digestion

Project Partners

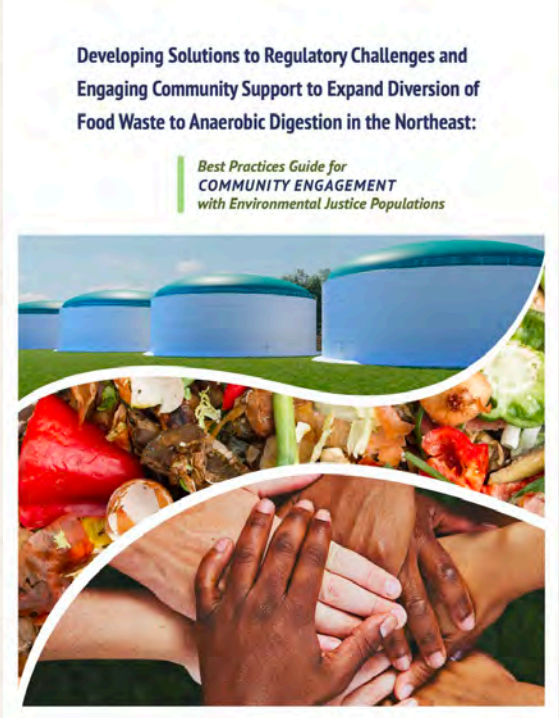
- Northeast Recycling Council (NERC)
- Clean + Healthy New York
- Connecticut Coalition for Environmental Justice (CCEJ)

Project Materials

Goal: Increase knowledge about the regulatory requirements of Anaerobic Digestion, provide resources for community members about the how to be involved, and encourage AD developers to practice to engage in good community involvement



Regulatory Guide



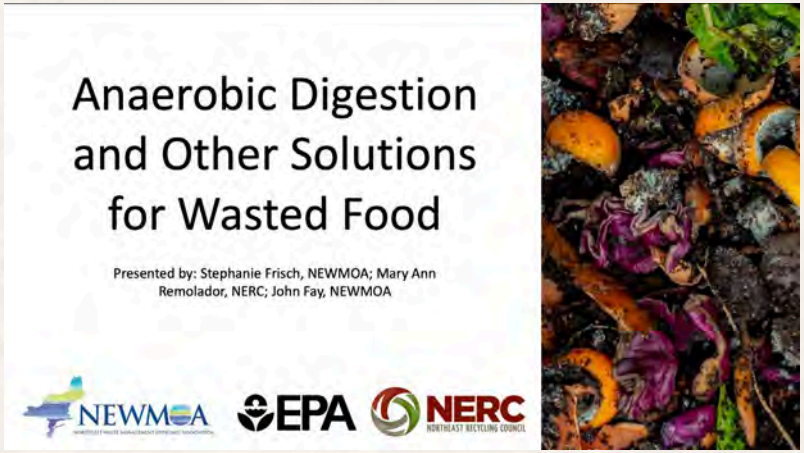
Community Engagement Guide

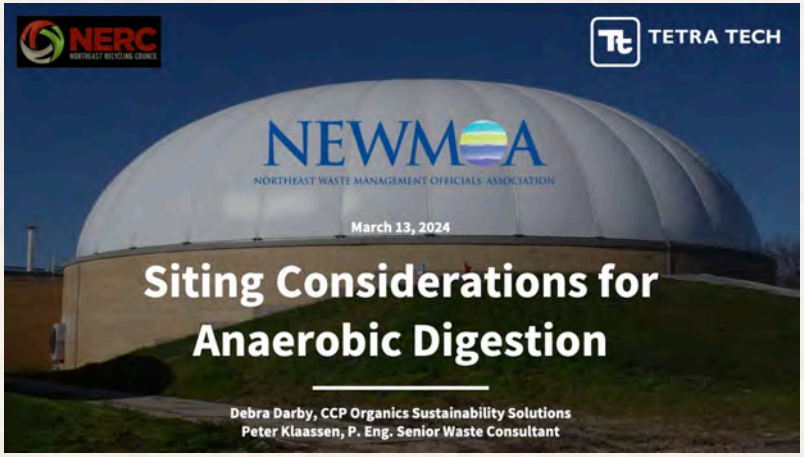
AD Road Map

https://www.newmoa.org/projects/anaerobic-digestion-project/

Webinar Series

Goal: Encourage discussion on AD regulatory and community engagement topics with field experts





https://www.newmoa.org/projects/anaerobic-digestion-project/

Solid Waste Data Reports:

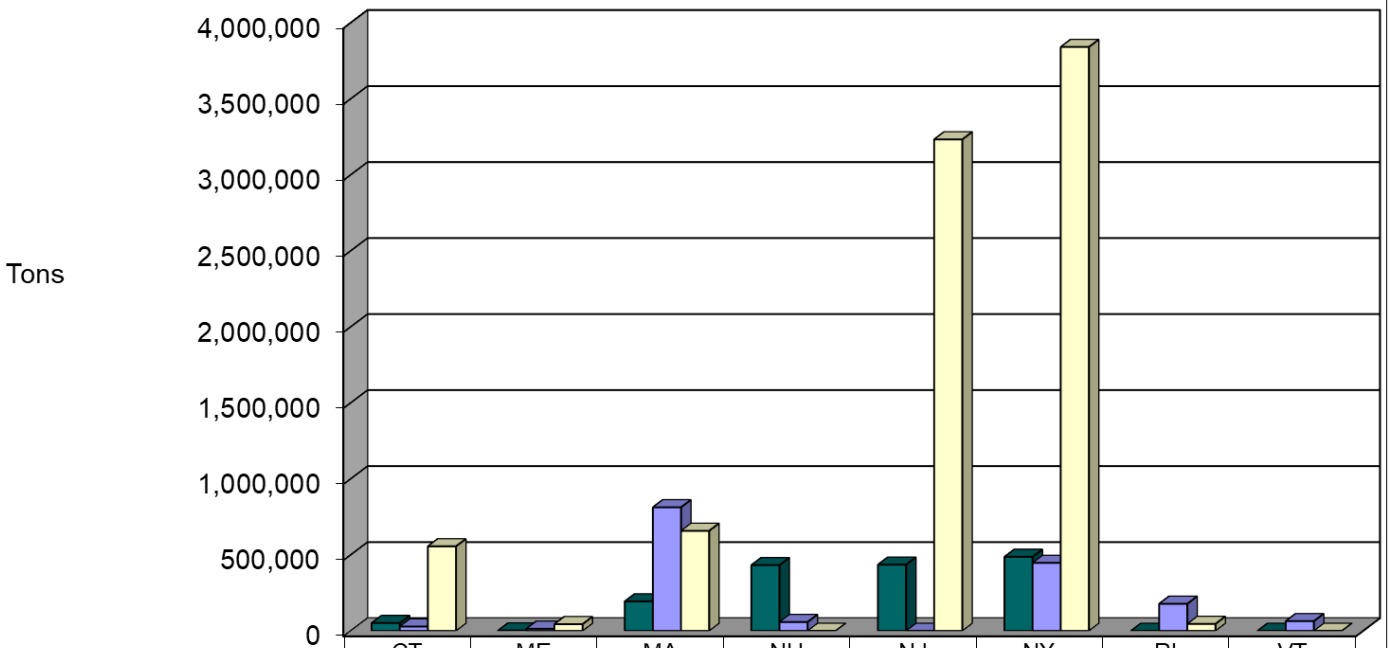
- Interstate Flow of MSW for Disposal
- Disposal Capacity

MSW Interstate Flow

- Municipal Solid Waste (MSW) only
  - Started with 1999 data! Recently, a report on each even year's data
- Disposal of MSW generated by a state:
  - In-state disposal
  - Exports to other NEWMOA states & outside region
- Generally, use disposal facility data
- Data can differ from what states publish:
  - Direct haul over state line
  - Pass-through (e.g. MSW generated in MA is direct hauled to a transfer station in RI & then shipped to AL for disposal)
- Regional overview & state-specific graphs
- Webpage with Reports: https://www.newmoa.org/projects/municipal-solid-waste/

DRAFT DATA!

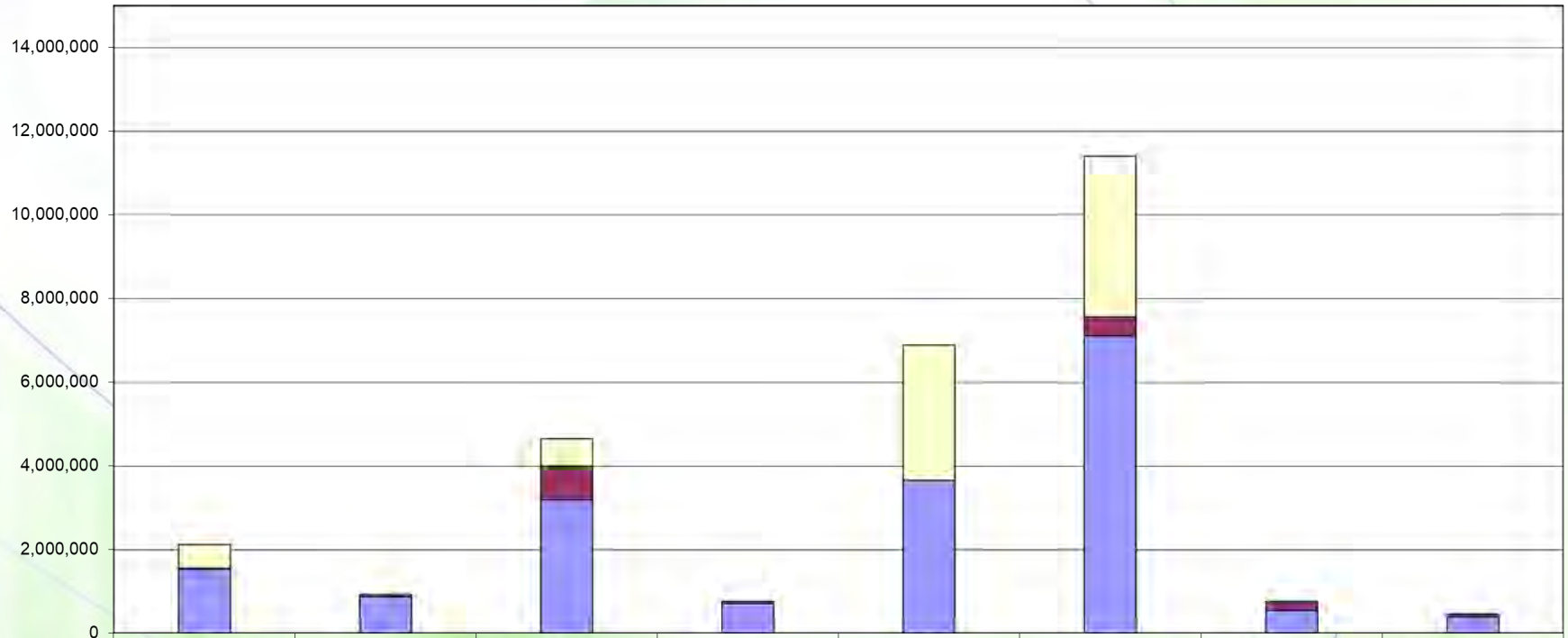
Figure 1: 2022 MSW Imports & Exports for Disposal (Tons)



	CT	ME	MA	NH	NJ	NY	RI	VT
Imports from NEWMOA States	51,643	2,425	193,854	432,412	435,390	487,082	0	0
Exports to NEWMOA States	28,524	13,657	813,084	58,275	69	447,215	178,125	63,857
Exports to Non-NEWMOA States & Provinces	556,088	44,090	658,076	0	3,233,231	3,841,123	45,760	0

DRAFT DATA!

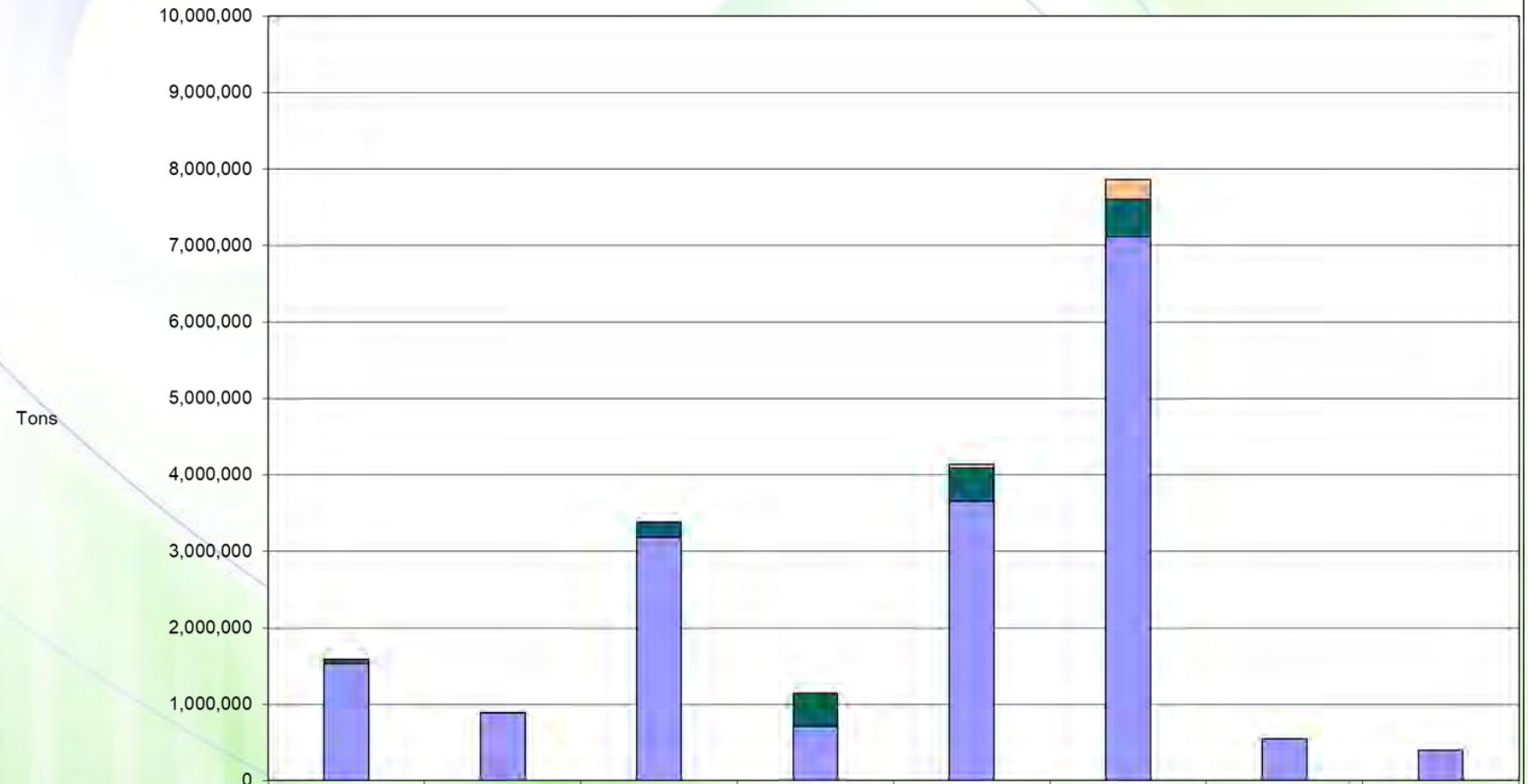
Figure 2: 2022 MSW Generated by State & Disposed (Tons)



	CT	ME	MA	NH	NJ	NY	RI	VT
Exports to Non-NEWMOA	556,088	44,090	658,076	-	3,233,231	3,841,123	45,760	0
Exports to NEWMOA States	28,524	13,657	813,084	58,275	69	447,215	178,125	63,857
Disposed In-state	1,534,449	882,237	3,186,591	708,289	3,656,055	7,117,722	548,595	401,196

DRAFT DATA!

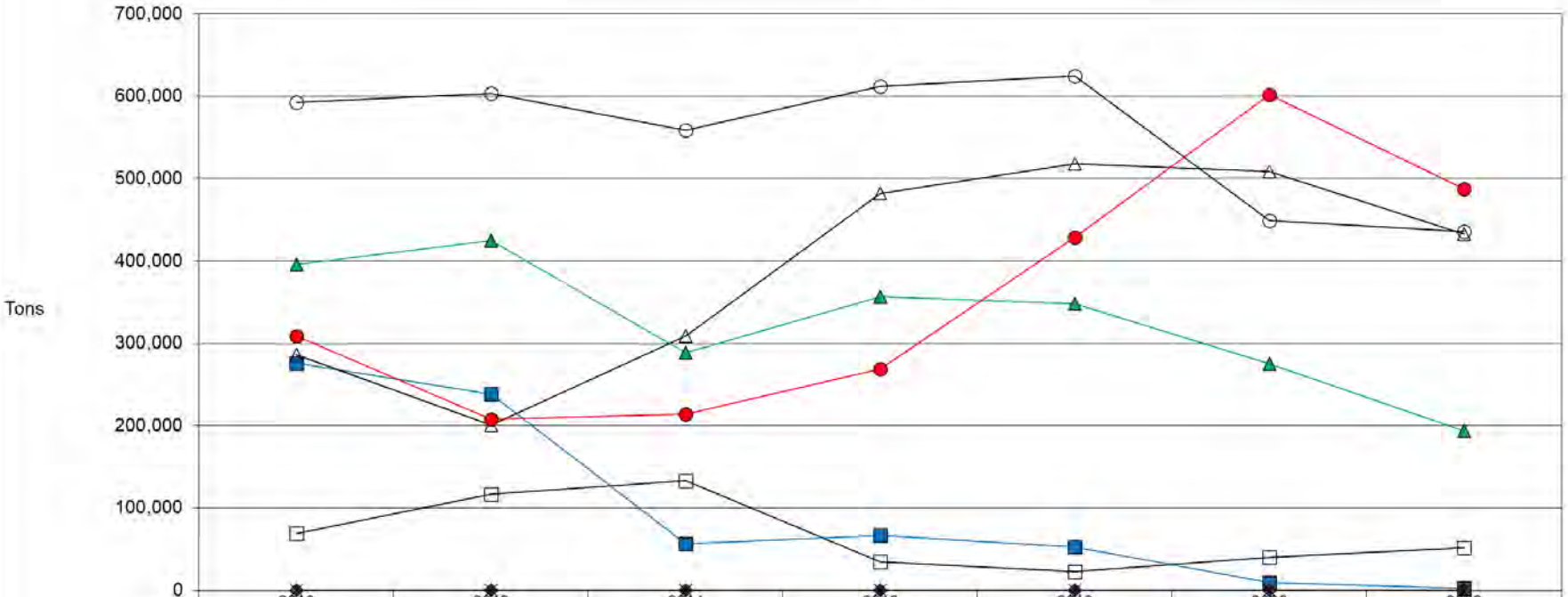
Figure 3: 2022 Total Quantity of MSW Disposed of In-State (Tons)



	CT	ME	MA	NH	NJ	NY	RI	VT
Imports from Non-NEWMOA States	0	0	0	0	48,742	255,258	0	0
Imports from NEWMOA States	51,643	2,425	193,854	432,412	435,390	487,082	0	0
In-state Generated Waste	1,534,449	882,237	3,186,591	708,289	3,656,055	7,117,722	548,595	401,196

DRAFT DATA!

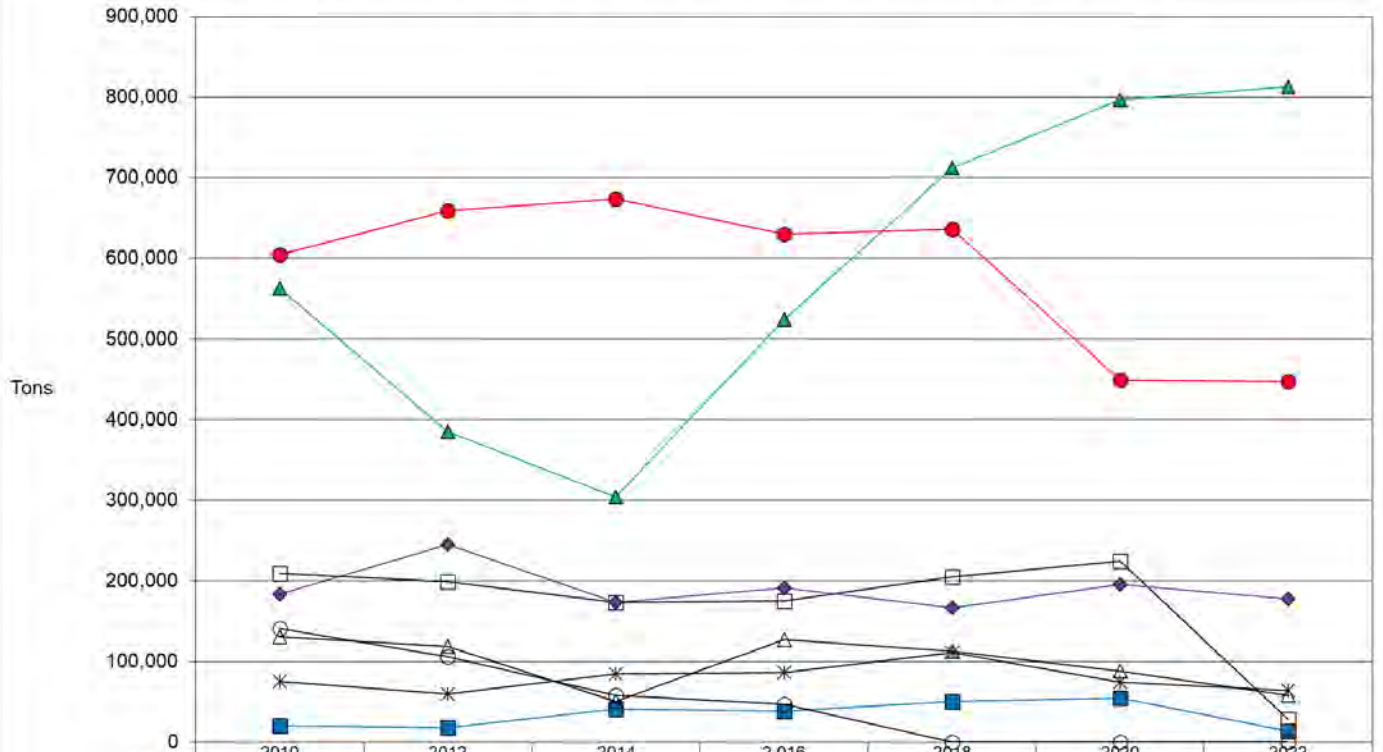
Figure 5: MSW Imports from NEWMOA States: 2010 through 2022 (Tons)



	2010	2012	2014	2016	2018	2020	2022
CT	69,455	116,985	133,439	34,869	23,201	40,418	51,643
ME	275,755	238,312	56,416	66,973	52,757	9,472	2,425
MA	395,630	424,638	288,344	356,605	347,822	275,409	193,854
NH	286,187	200,472	308,699	481,758	518,018	508,231	432,412
NJ	592,051	603,073	558,902	611,704	624,281	448,885	435,390
NY	308,999	208,007	213,768	268,598	428,338	602,209	487,082
RI	0	0	0	0	0	0	0
VT	0	0	0	0	0	0	0

DRAFT DATA!

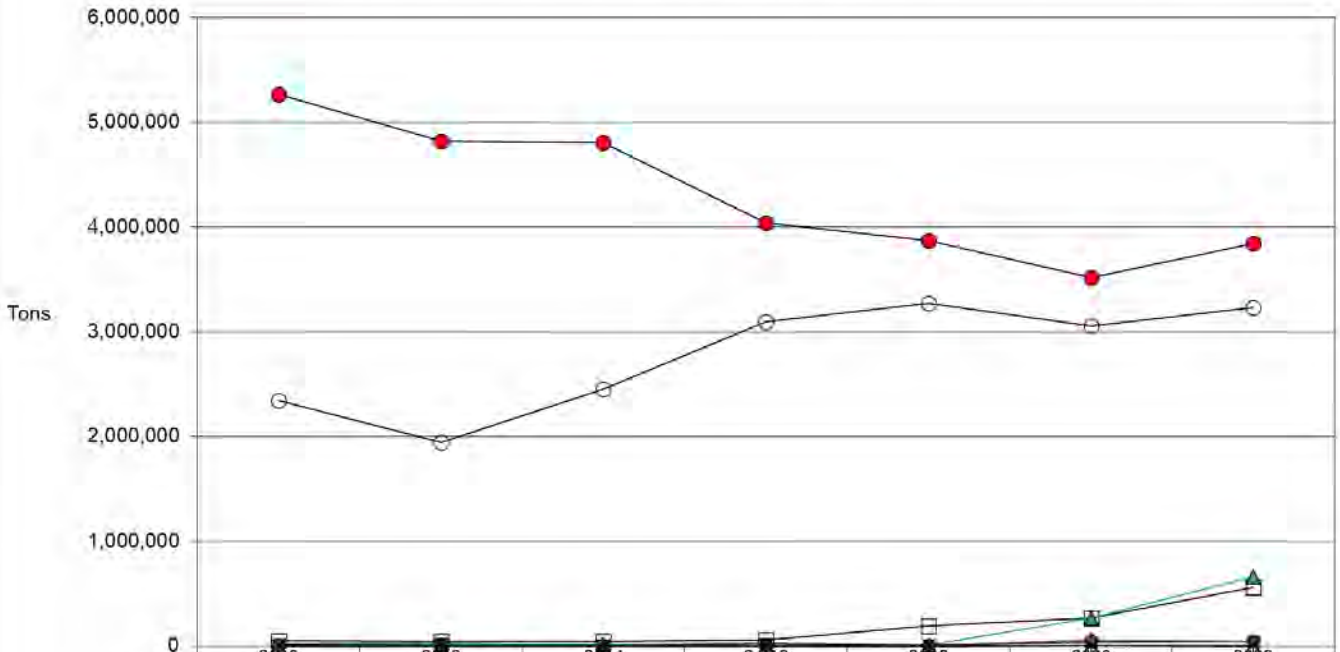
Figure 6: MSW Exports to NEWMOA States: 2010 through 2022 (Tons)



	2010	2012	2014	2,016	2018	2020	2022
CT	208,927	199,399	173,740	175,321	204,932	224,935	28,524
ME	20,375	18,220	41,194	38,410	50,066	54,936	13,657
MA	562,658	385,512	304,211	524,557	711,989	797,321	813,084
NH	130,960	118,989	50,752	127,390	113,185	87,813	58,275
NJ	141,413	106,086	57,738	46,742	211	0	69
NY	604,663	659,073	673,718	630,382	636,112	448,894	447,215
RI	183,996	245,250	173,420	191,359	166,508	195,860	178,125
VT	75,085	60,161	84,668	86,366	111,414	73,999	63,857

DRAFT DATA!

Figure 7: MSW Exports to Non-NEWMOA States & Provinces 2010 through 2022 (Tons)



	2010	2012	2014	2016	2018	2020	2022
CT	53,983	44,438	40,882	54,562	192,971	270,372	556,088
ME	17,224	21,629	9,086	23,506	9,288	34,144	44,090
MA	5,499	16,067	18,268	5,733	8,012	267,717	658,076
NH	0	0	0	0	0	49	0
NJ	2,340,148	1,945,544	2,452,315	3,095,276	3,273,284	3,056,670	3,233,231
NY	5,266,639	4,815,829	4,802,879	4,039,678	3,869,438	3,518,547	3,841,123
RI	2,960	3,558	123	0	567	58,678	45,760
VT	0	0	0	0	0	0	0

Solid Waste Disposal Capacity

- All solid waste (primarily C&D, MSW, WTE ash, & bulky wastes)
- Facilities in the region only
- Snapshot in time - 2018 & 2019 data:
  - Quantities
  - Permitted capacity
- Regional overview & state-specific charts
- Report (published in 2021): https://www.newmoa.org/wp-content/uploads/2022/06/Solid_Waste_Disposal_Capacity21.pdf

Figure 1: Type of Waste Disposed

(35,206,375 tons)

Note: 2018 for CT, NH, NY, & RI & 2019 for ME, MA , NJ, & VT

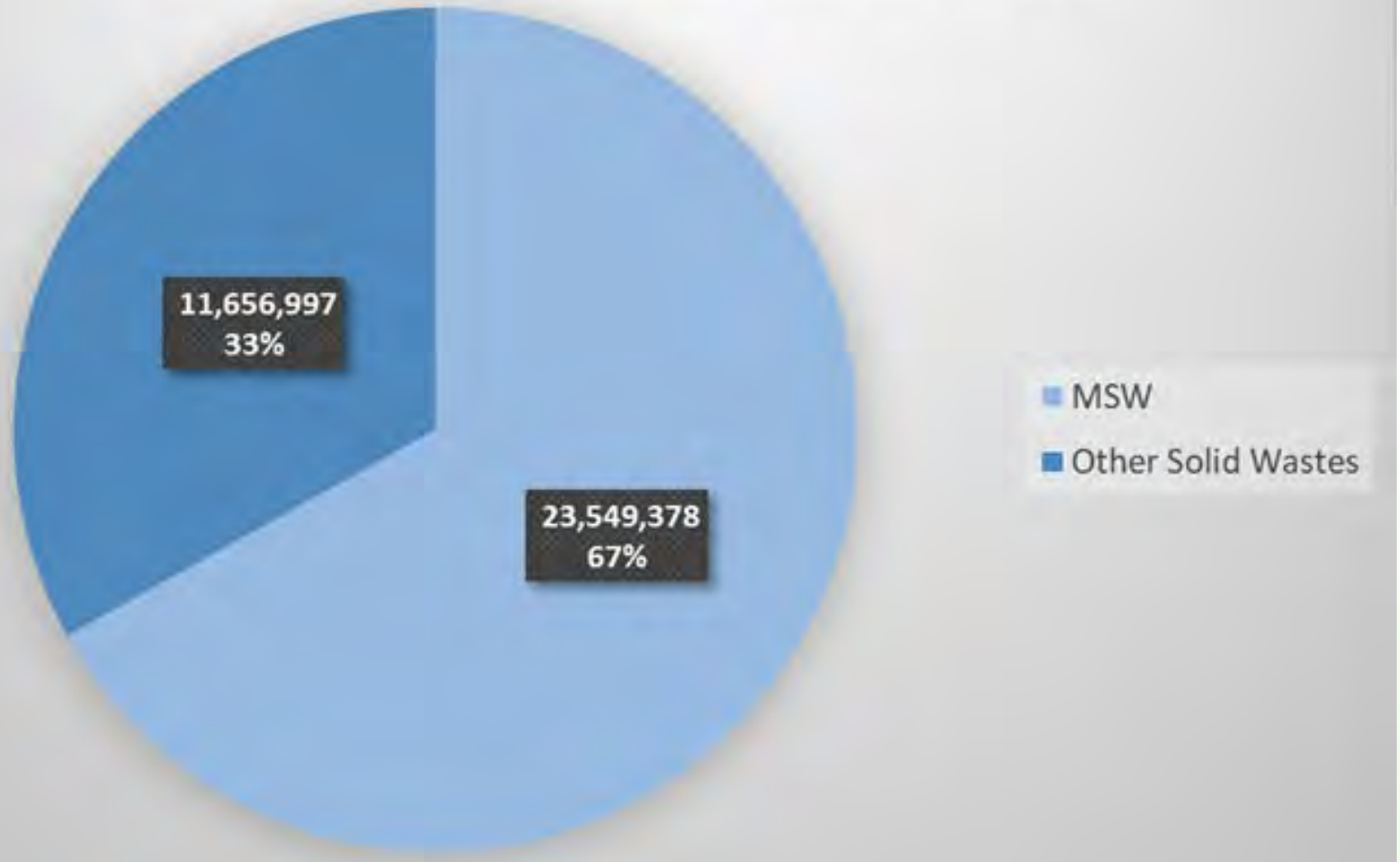


Figure 2: Source of Solid Waste Disposed: In-State Versus Out-0f-State

(35,206,375 tons)

Note: 2018 for CT, NH, NY, & RI & 2019 for ME, MA , NJ, & VT

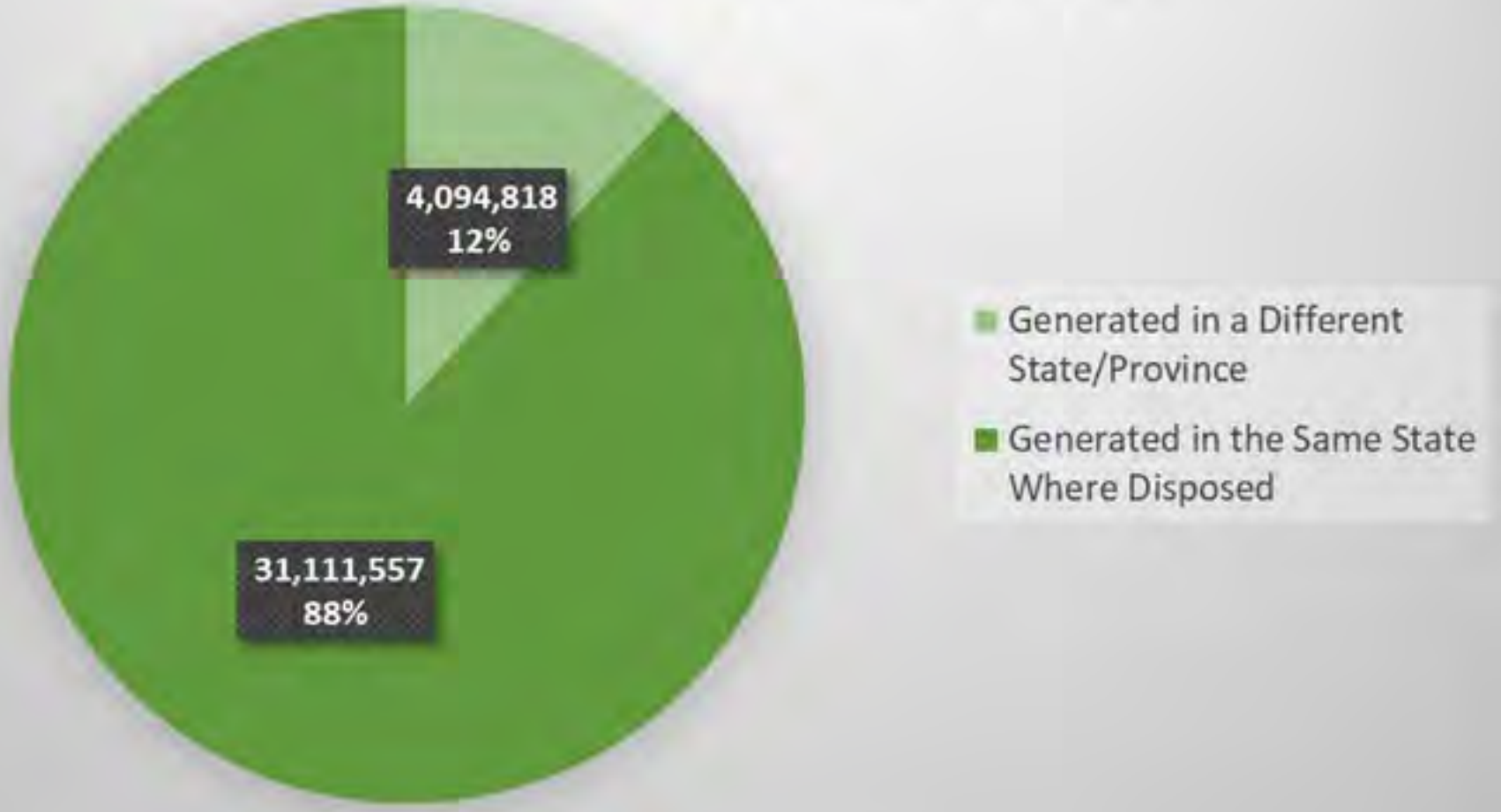
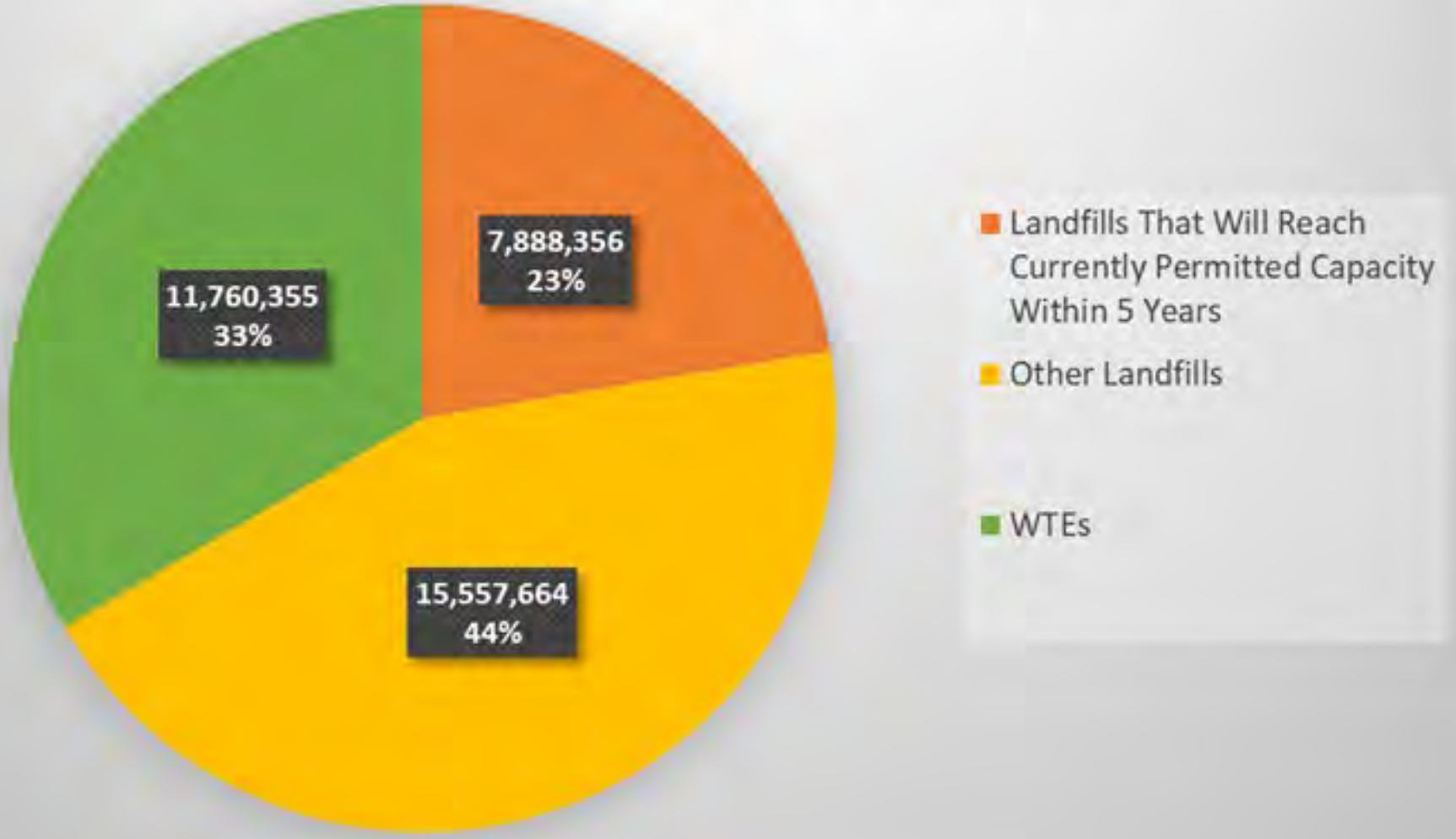


Figure 3: Solid Waste Disposed By Facility Type

(35,206,375 tons)

Note: 2018 for CT, NH, NY, & RI & 2019 for ME, MA , NJ, & VT



Questions?

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