

Vermont's Universal Recycling law
Status Report December 2016



EXECUTIVE SUMMARY

Vermont's Universal Recycling law is working.

- Trash disposal decreased 5% statewide from 2014 to 2015
- Recycling and composting increased by 11,793 tons from 2014 to 2015 (2%);
- Food donation grew by nearly 40% from 2015-2016, according to the Vermont Foodbank; and
- More Vermonters have access to recycling collection than ever before.

“After decades of landfilling more than two-thirds of Vermont’s materials, it is appropriate to shift our focus to recycling, food donation, and composting.”

- Cathy Jamieson, Solid Waste Program Manager

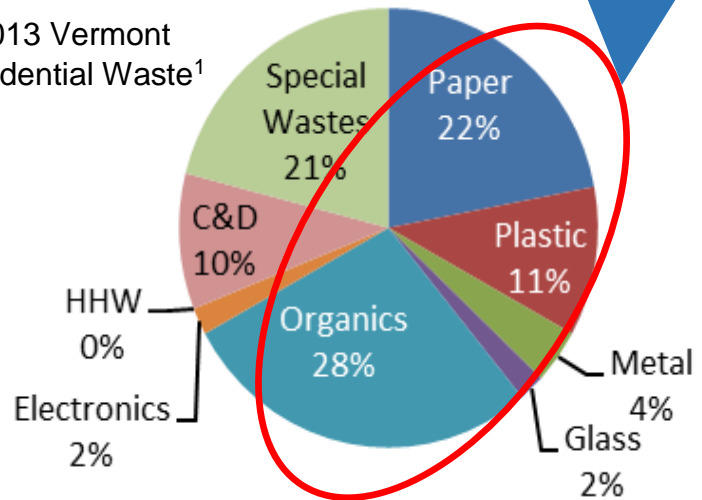


BACKGROUND

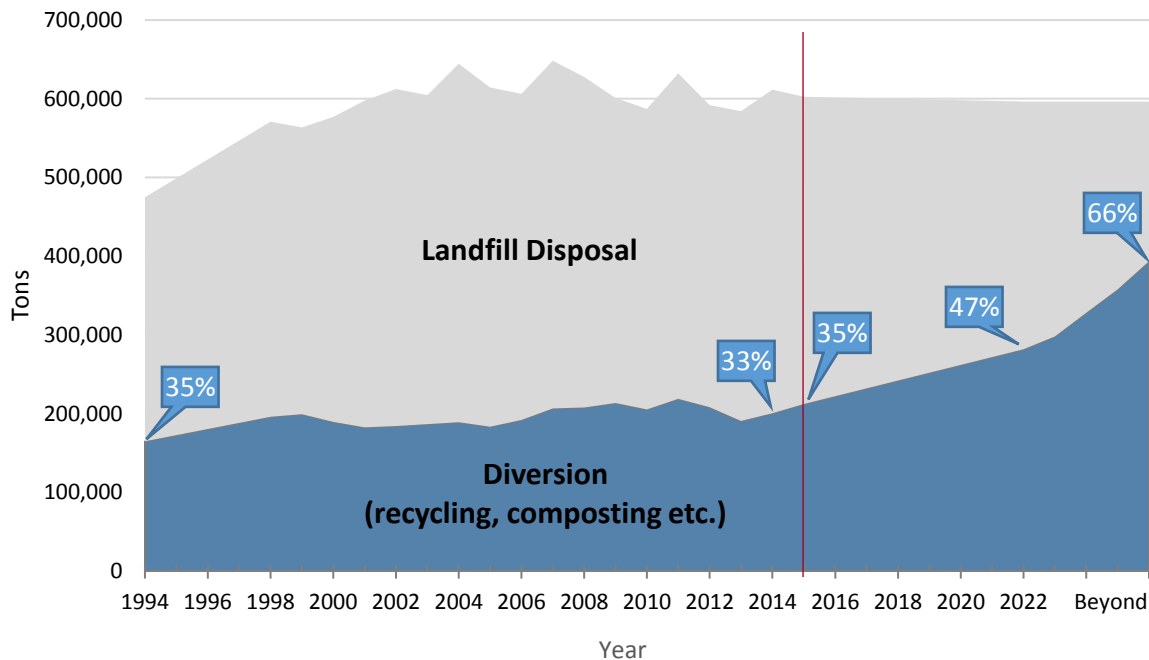
Vermont's Universal Recycling law (Act 148) was unanimously passed by the Legislature in 2012 in response to the state's stagnant recycling rates that had hovered around 30-36% for nearly two decades. As much as 50% of Vermonter's trash includes recyclable or compostable materials like food scraps and leaf and yard debris. With concern over wasting valuable natural resources and the impact of this waste on global climate change, the stage was set to boost recycling and launch statewide composting.

Up to 50% of our waste could be recycled, donated, or composted.

2013 Vermont Residential Waste¹



Vermont landfill disposal and diversion amounts over time



¹ DEC completes waste composition studies approximately every 5 years. 2013 was the most recent study with the next to be completed in 2018.

GOAL OF UNIVERSAL RECYCLING

- Decrease waste disposal and increase recycling and composting;
- Protect the environment, conserve natural resources and reduce greenhouse gas emissions;
- Provide consistent and convenient recycling and composting services statewide; and
- Incentivize investment in recycling, food donation, and organics diversion to build businesses and jobs that strengthen Vermont's economy.

The goals of Universal Recycling are to decrease the amount of waste disposed and increase the state's recycling and composting rate through a phased in timeline that started in 2012 and finishes in 2020. Recycling materials conserves resources while reducing energy consumption and greenhouse gas emissions. The law achieves this **by providing more consistent and convenient services for recycling and composting services, wherever trash is managed, throughout the state.**

In addition, this legislation sends clear signals to both the private and public sector that recyclable and organic materials (food scraps/leaf and yard debris) will be available, **which incentivizes investment in recycling, food donation, animal feeding, composting, and anaerobic digestion businesses, infrastructure and services.** This in effect puts our waste to work as part of a circular economy that contributes to Vermont's environment and economy and green jobs rather than causing harm. The Agency of Natural Resources, Department of Environmental Conservation (DEC), is tasked with implementing Universal Recycling.

Employees sort recycling for market, at the Chittenden Solid Waste District's Materials Recovery Facility in Williston.



WHAT THE LAW DOES

- 1. RECYCLING REBOOT & ORGANICS EMPHASIS:** The law bans the disposal of baseline recyclables (2015), leaf/yard/clean wood debris (2016), and food scraps (in phases culminating in full ban in 2020). Baseline recyclables include the statewide six: paper (mail, magazines, newspaper, office paper, paper bags, and box board); cardboard; aluminum (cans, foil, and pie tins); steel cans; glass bottles and jars; and hard plastic bottles and containers #1 and #2.
- 2. RECYCLING/COMPOSTING SERVICES:** The law requires transfer stations and haulers that collect trash to also offer collection services for baseline recyclables, leaf and yard debris, and food scraps. Haulers and facilities can charge for these services, but the purpose is to make recycling and composting as easy and convenient as trash disposal.
- 3. PAY AS YOU THROW:** Requires residential trash costs to be charged using Pay As You Throw pricing. Residents must be charged using volume or weight based pricing such as paying by the bag, by the cart or dumpster, or by the pound. Like paying for gas by the gallon, this incentivizes recycling and composting resulting in less trash disposal.
- 4. PUBLIC SPACE RECYCLING:** Requires publicly owned buildings and spaces, such as state buildings and parks, schools, town offices and town parks to offer a recycling container next to every trash container.





Universal Recycling Law

TIMELINE

**JULY 1
2014**

- » Transfer stations/Drop-off Facilities must accept residential recyclables at no separate charge
- » Food scrap generators of 104 tons/year (2 tons/week) must divert material to any certified facility within 20 miles

**JULY 1
2015**

- » Statewide unit based pricing takes effect, requiring residential trash charges be based on volume or weight
- » Recyclables are banned from the landfill
- » Transfer stations/Drop-off Facilities must accept leaf and yard debris
- » Haulers must offer residential recycling collection at no separate charge
- » Public buildings must provide recycling containers alongside all trash containers in public spaces (exception for restrooms)
- » Food scrap generators of 52 tons/year (1 ton/week) must divert material to any certified facility within 20 miles

**JULY 1
2016**

- » Leaf, yard, and clean wood debris are banned from the landfill
- » Haulers must offer leaf and yard debris collection
- » Food scrap generators of 26 tons/year (1/2 ton/week) must divert material to any certified facility within 20 miles

**JULY 1
2017**

- » Transfer stations/Drop-off Facilities must accept food scraps
- » Haulers must offer food scrap collection
- » Food scrap generators of 18 tons/year (1/3 ton/week) must divert material to any certified facility within 20 miles

**JULY 1
2020**

- » Food scraps are banned from the landfill



» For more information, visit www.recycle.vt.gov



UNIVERSAL RECYCLING BENEFITS

- Saves valuable resources and promotes sustainability,
- Reduces GHG emissions by an estimated 37% by 2022,
- Supports green jobs, creating new markets and business opportunities,
- Reduces need for landfills, improving the health of our environment,

FOCUS ON ORGANICS

Vermonters have been recycling for decades—since the '70s or '80s in many communities, but the Universal Recycling law makes it the new normal. Thus, residents across Vermont now have more recycling options including curbside services, making it easier than ever to do the right thing.

EVERY YEAR, NEARLY 100,000 TONS OF ORGANIC MATERIAL IS ESTIMATED TO BE LANDFILLED IN VERMONT.

While recycling is well established, it is estimated that organic materials—food scraps, leaf and yard debris, clean wood, and compostable dirty paper—make up almost a third of our waste. Nearly 100,000 tons of organic material is estimated to be landfilled every year. As organic material decomposes in a landfill it produces methane gas—a greenhouse gas that is 20 times more damaging than carbon dioxide.

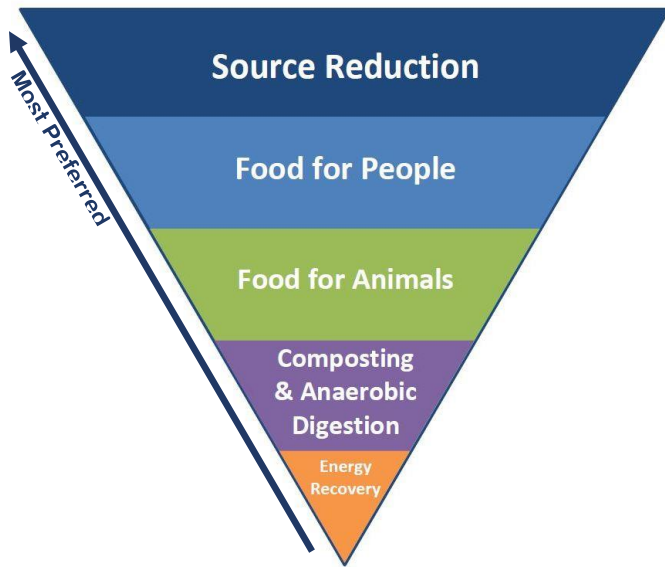
“Vermont’s Universal Recycling law has shifted the focus from feeding landfills to feeding hungry Vermonters. What is not donated can be fed to animals, composted, or used to create renewable energy in anaerobic digesters.”

- Alyssa B. Schuren, DEC Commissioner

For this reason, we need to focus on organics to find higher and better uses for this material and prevent its contribution to climate change. In fact, the US EPA and USDA have both recently joined together calling for a 50% reduction in food waste by 2030. Vermont is not alone. With the passage of Vermont’s Universal Recycling law, we have joined the states of Massachusetts, Connecticut, Rhode Island, and California to shift the focus from feeding landfills to feeding people, feeding animals, creating soil amendments like compost, and creating renewable energy through anaerobic digestion technology. The 2012 Universal Recycling law also set forth a hierarchy of beneficial uses for organics shown below.



Vermont Food Recovery Hierarchy



Source reduction, means smart buying and procurement to reduce spoiling.

Donate quality, edible food for people in need and stop wasting food.

Livestock feed, such as brewery grains and other foods.

Compost & Digestion, people can compost at home or at a composting facility. Vermont farm digesters also accept some food residuals.

Energy Recovery, refers to woody organic materials used for biomass fuel.

While a person or business that produces food waste is not required to strictly follow the order of the hierarchy (such as feed animals before they compost the material), the hierarchy reminds us of the highest and best priority uses for this material.

Richmond Food Shelf



IMPLEMENTATION TO DATE

The first significant milestones of the Universal Recycling law began to take effect in July 2014. The Department of Environmental Conservation (DEC) in collaboration with solid waste districts, alliances, and independent towns, has been working with the private sector and other stakeholders to implement its various phases. The following is a summary of the preliminary outcomes of the law. Approximately three years into its implementation measurable changes to diversion and disposal are being observed and DEC anticipates continued momentum in 2017 and beyond.

Transfer stations & haulers now collect baseline recyclables

Solid waste facilities including transfer stations and landfills that accept trash were required to offer collection of baseline recyclables by July 1, 2014. After comprehensive outreach by DEC, including letters to all transfer stations; phone calls; public meetings with solid waste districts, towns, solid waste haulers, and transfer station attendants; and site visits—all transfer stations and landfills were confirmed to be offering recycling collection services.

To help inform haulers of the new requirements, DEC sent three mailers and held two rounds of haulers meetings around the state in 2014 and again in 2016. To date, DEC has been responding on a case by case basis, to resident and business complaints about haulers not providing services as required by the Universal Recycling law. Since June 1, 2015, 50 complaints have been received concerning 19 separate waste haulers. Nearly all complaints have been resolved after a phone call or letter from DEC. Two Notice of Alleged Violations (NOAVs) were issued for failure to provide recycling services and both resulted in hauler compliance.

Additionally, in July 2016, utilizing nearly all staff from the solid waste program, DEC conducted ten site visits at the largest transfer stations around the state as part of a “Universal Recycling spot check day” looking for baseline recyclables and leaf and yard debris in loads of trash brought in by haulers. Of the 124 loads observed, only about 10% contained notable amounts of recyclables—mainly cardboard. The purpose for the spot check day was to collect information on how well recycling was working around the state.

All municipalities have adopted Pay As You Throw pricing.

Unit-based pricing, or Pay As You Throw (PAYT), creates an incentive to produce less trash and to recycle and compost. By paying for the units of trash you produce, residents are given control over their solid waste costs and the more they recycle and compost, the more money they save. DEC has confirmed that all of Vermont's towns and solid waste districts, have adopted ordinances requiring haulers and facilities to use unit-based pricing structures. As a result, some towns have seen significant decreases in trash disposal and several have saved money on trash collection costs.

When the Town of Vernon switched to Pay As You Throw, recycling jumped nearly 50% and trash volumes were cut in half. Vernon's hauler now offers weekly recycling collection to keep up with demand. The towns of Canaan and Newark experienced similar drops in trash after switching to PAYT, which also reduced their towns' trash disposal costs.

“We went to PAYT because it includes everyone and everyone has an interest in increasing recycling and reducing waste management costs. This is the only system that rewards individuals for their efforts to reduce their costs by recycling and composting,” said Gregory Noyes, Canaan Select Board Member. “When you compare our last budget with the old system and our current budget it is clear as night and day PAYT is the



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way to go. Every town can adopt a PAYT System that fits their town. We had to make adjustments along the way. We would never go back to the old system.”

Public Space Recycling is Happening

In June 2014 letters were sent to all towns outlining the Universal Recycling requirements including those for public spaces—that recycling containers needed to be paired with each trash can. Towns and solid waste districts have been working together to purchase recycling bins. Driving down the streets of Barre you can now see blue recycling bins next to black trash cans along the renovated street-scape.

For the past three years (2013-2016) the Vermont Agency of Natural Resources has hosted “Municipal Day” to provide technical assistance to towns. The Department of Environmental Conservation gave Universal Recycling presentations about public space recycling options at each of these events and participated in a town solid waste event in February 2015 hosted by the Vermont League of Cities and Towns.



Built-in Flexibility

The Universal Recycling law was written with the understanding that one size does not fit all.

Haulers can request an exemption from collecting recyclables, leaf and yard debris, and food scraps by working with their solid waste management district, alliance, or town to apply for an amendment to their Solid Waste Management Plan or “SWIP”. Facilities are also eligible for variances from the requirements to offer collection of leaf and yard debris and food scraps.

Businesses and other producers of food waste are permitted to dispose of a “de minimus” amount of food waste if they have an active composting program in place where staff have received instruction on separating food waste from trash.

Finally, residents who compost at home are not required to compost meat and bones, which can be disposed of in the trash.

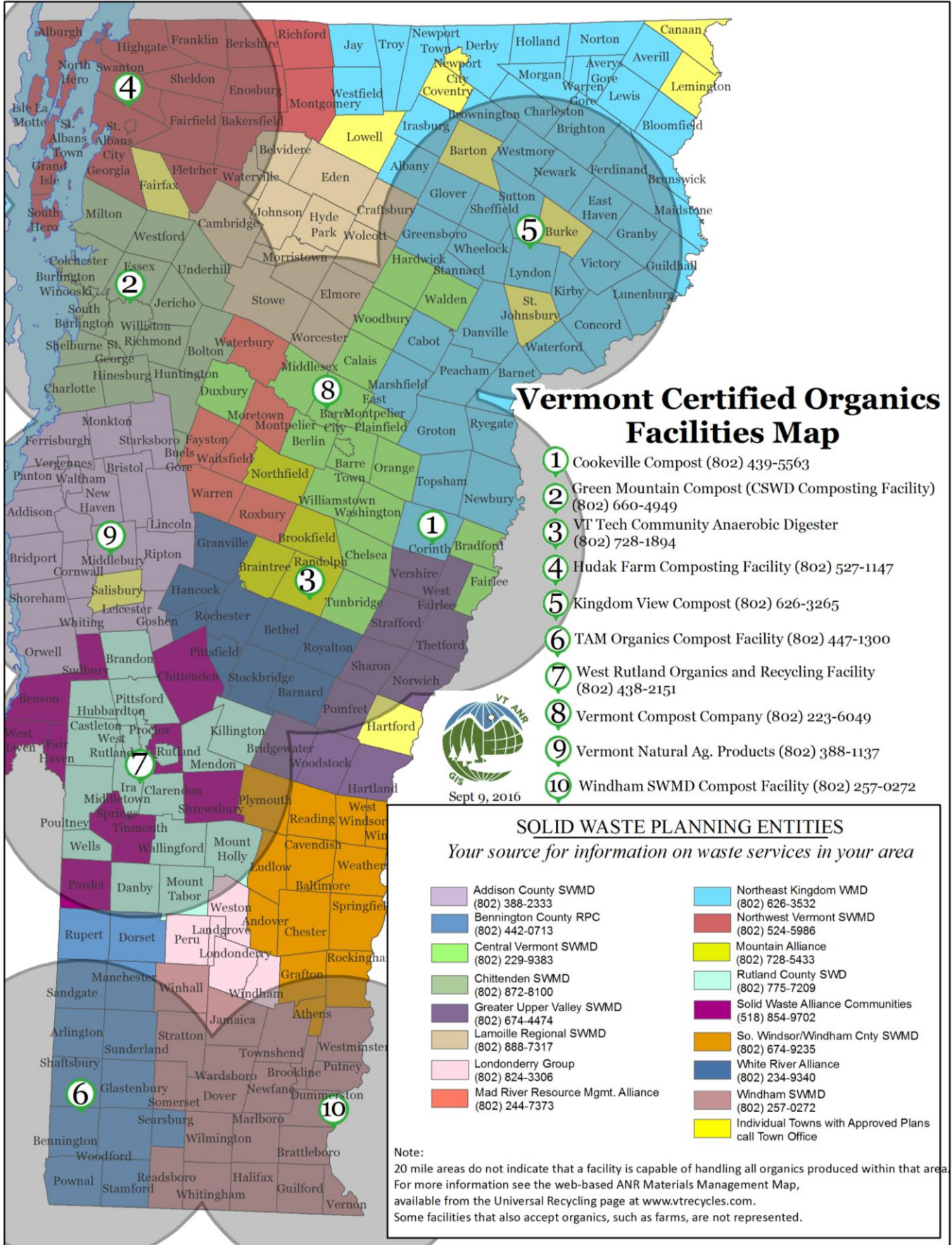
But What About Food Scraps?

Some states have struggled with encouraging investment in food scrap processing facilities such as composters and anaerobic digesters. Vermont, however, has a lot to be thankful for.

- 10 Certified Composting or Anaerobic Digestion Facilities (see map on the next page)
- 13 Permitted Food Scrap Haulers
- 17 Farm Digesters - many already taking food processing residuals
- 100s of Businesses, Schools, and Institutions were composting even before the law went into effect – like UVM Medical Center, The Wayside Restaurant, and Bennington College
- DEC confirmed that the largest food waste producers, located within 20 miles of an organics facility, are separating food scraps as required by the Universal Recycling law.

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DEC RESOURCES

Since the passage of Universal Recycling DEC has worked with towns and solid waste districts around the state to implement this new law and conduct direct outreach to stakeholders at all levels. DEC staff have presented at hundreds of meetings and conferences both locally and regionally, and met multiple times with associations and industry groups. Here are just a few metrics:

Work with Vermont Stakeholders (among many others)

Solid Waste District Managers Association	Superintendents Association
Solid Waste Haulers	Department of Health Sanitarians
Retail Grocers Association	Agency of Agriculture
Health Care Association	Buildings and General Services
Campus Sustainability Network	Public Service Department
Assoc. of Hospitals and Health Systems	Department of Corrections
League of Cities and Towns	Agency of Transportation
Principals Association	Fish and Wildlife Department
School Board Association	Department of Forests, Parks, and Rec.

Media Coverage

In April 2015, the Vermont Center for Community Journalism ran this story on Northeast Kingdom recycling.

<https://www.youtube.com/watch?v=1RnvUtnH-c4&t=21s>



Recycling Law

www.youtube.com

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Five Universal Recycling videos were recently released by DEC and will be advertised in early 2017.

<https://www.youtube.com/playlist?list=PLb5jIRj04Vi9DrzVejx9mUhs8ERQMmYz2>



Be Part of the Vision: Universal Recycling in Vermont

www.youtube.com

Did you know? Vermonters regularly recycled metals, glass, papers, and food scraps a way of life until the 1950's. Materials collected from Vermont towns ...

Webinar for Food Establishments

<https://www.youtube.com/watch?v=fA2C3DzBKVM>



Universal Recycling For Food Establishments: Tackling Food ...

www.youtube.com

A 1-hour presentation designed for food establishments in Vermont (restaurants, supermarkets, food retailers, resorts, etc.) needing a compact overview of th...

Guidance & Fact Sheets (available at www.VTrecycles.com)

Universal Recycling (UR) [Summary Sheet](#) & [Timeline](#)

[Recycling Guidance for Residents](#); UR for [Businesses](#), UR for [Haulers](#), UR for [Municipalities](#)

[Variable Rate Pricing \(Pay As You Throw\) Guide](#)

[Parallel Collection Factsheet](#)

Statewide List of [Food Scrap Haulers](#)

[Managing Food Scraps at Businesses](#)

[Food Donation](#) and [School Share Table](#) Guidance – Created in partnership with the Department of Health and Agency of Agriculture

[Leaf, Yard, and Clean Wood Debris Guide](#)

[Resident Home Compost Tips](#)

Recycling Testimonials



Teri Kuzcynski, District Manager, Addison County Solid Waste Management District

"The Addison County Solid Waste Management District (ACSWMD) has mandated unit-based pricing, parallel collection and source separation of recyclables and leaf & yard waste via ordinance since 1993. However, the Universal Recycling Law has unearthed new enthusiasm for the systems that were already in place, and raised recycling and landfill diversion awareness for all ACSWMD residents and businesses. Many are now looking ahead toward the last frontier of the law, food scrap diversion, and while we have been impressed by the number of businesses that are already diverting their food scraps, a good percentage are only pursuing diversion because of the new law."

"Since state recycling kicked-in, we have seen a huge jump in recyclables from both residential and commercial customers. Most people already did this, but now there is a little extra motivation." said Jeff Myers, President, Myers Container Service.



Jeff Myers, President, Myers Container Service

"Act 148 is another step in the strong history and already robust ethic of recycling in Vermont. It is certainly a crucial element in the progression of the value of resource renewal and conservation across Vermont's economic and environmental landscape." said John Casella, CEO of Casella Resource Solutions.



John Casella, CEO, Casella Resource Solutions

"Recycling makes sense environmentally and economically, and the Universal Recycling Law has reinforced that," said Paul Tomasi, director of Northeast Kingdom Waste Management District (NEKWMD). "Recycling is simply what we do here in Vermont."

The NEK District's Lyndonville recycling facility saw a 25% increase in recyclables during the first three months after the recycling requirements went into effect (July, August, and September 2015).

"The Northeast Kingdom already benefits from 12 food scrap drop-off locations, helping many residents compost when they prefer not to do it at home. It's become second nature to many households and now their trash no longer stinks." said Paul Tomasi.



Paul Tomasi, Executive Director, NEK Waste Management District

Organics Testimonials

Universal Recycling Boosts Fresh Food Donation

In 2015 the Vermont Foodbank reported a 25-30% increase in food donation because of the Universal Recycling law. Not only has donation grown another 40% in 2016, but the Foodbank and its partners report that their new Fresh Rescue Program has captured healthier, fresher foods like fruits, vegetables and frozen meat, that are now making their way into refrigerators and onto plates of Vermonters in need.



Donated Fresh Vegetables

Lieutenant Scott Murray of the Salvation Army of Greater Burlington Area reported in 2016, “We are spending less than \$500 a month on food and we'll serve around 40,000 meals this year. That works out to a food cost per meal of under \$0.07 versus about \$1.47 two years ago. And the quality of what we're serving is so much better than before we started getting these particular fresh food donations -- healthy and nutritious meals, fresh fruits and vegetables and new dinner offerings such as kale, pork, chicken and so much more. This program has changed how we cook, what we serve, and benefits so many people. There is no way we could afford to buy the same food as is donated.”

By the end of the first year of the program in 2014, sixteen Fresh Rescue partners collected 347,000 pounds of food that would have otherwise gone to waste. Today, forty Fresh Rescue partnerships exist throughout the state, and more than a **million pounds** of fresh food is being saved from the dumpster and shared with Vermonters who need it the most.



Vermont Foodbank CEO, John Sayles, accepting the 2016 Governor's Award for Environmental Excellence at the State House.

“Partnering with the state Agency of Natural Resources (ANR), the Vermont Foodbank is deeply involved in implementing Vermont's universal recycling law (Act 148). The law's first priority is to get edible food to people who need it safely and efficiently. We partner with ANR to educate everyone about the new law, teach our fellow Vermonters how to reduce food waste at home, and encourage the safe donation of edible food to the Foodbank and its community partners. If that's not possible, we teach Vermonters how to compost, so those food scraps can enhance our soils and grow more local food,” said John Sayles, CEO of Vermont Foodbank.

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Creating a Culture of Composting

Chittenden Solid Waste District (largest by populous in the state) has reported a 10%-15% increase in food scrap composting each year since Universal Recycling took effect.

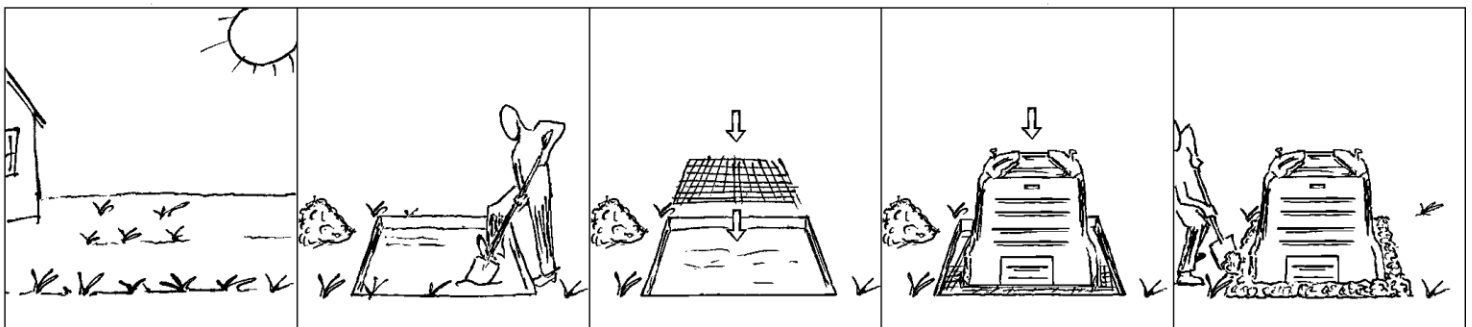
The **Central Vermont Solid Waste Management District** has worked to train, haul, and build school recycling and composting programs for over a decade. As of September 2014, all 25 public schools in the District are composting and have been trained in their School Composting Program. The District estimates that each year the kids keep approximately 250,000 pounds of food scraps from being wasted in the landfill.

The **Northeast Kingdom Waste Management District** (comprised of 49 towns and 50,000 residents) has reported a 300% increase in food scrap drop-off at their 12 regional recycling centers.

Eric Paris, Owner of Kingdom View Compost in Lyndonville said, "We consistently sell out of our compost in the spring and continue to get calls for it into the fall. We feel the need to expand upon this much needed source of revenue for our farm. Expansion will improve our composting operation and if that goes well we'll be in position to accept more food scraps and create more high quality compost, more efficiently and with less labor. We are very excited about this."

Next summer (July 1, 2017) Vermonters will have more options than ever to separate and compost their food waste, when the Universal Recycling law will ensure that all transfer stations that take trash also provide food scrap collection services.

In addition to other states, Vermont, Massachusetts, Connecticut, Rhode Island, and California are all working to reduce wasted food and help meet the EPA and US Department of Agriculture's nationwide goal of a 50% reduction in food waste by 2030. The ultimate aim is to improve overall food security and conserve our nation's natural resources.



DEC's guide for how to install a critter proof home composting system using galvanized wire mesh (hardware cloth).