

**Brenda Platt** 

Composting for Community Initiative Institute for Local Self-Reliance

May 1, 2023 Vermont Organics Recycling Summit

### A word about ILSR

ENERGY DEMOCRACY

BROADBAND



The Value Idling in Electric Vehicles — Episode 182 of Local Energy Rules



Case Study Shows How Local Providers Built World-Class Broadband in Rural North Dakota

#### INDEPENDENT BUSINESS



New Report: The Dollar Store Invasion

#### COMPOSTING FOR COMMUNITY



ILSR Helps Pass Bill Expanding On-Farm Composting of Food Scraps in MD!

# Building Local Power Fighting Corporate Control











#### A word about ILSR



#### Vermont's Community Solar Program

L by Abby Hornberger | Date: 22 Apr 2017 | F 💟 🤠 🔲



Unlike other states, Vermont's net metering program is not run by a utility company or thirdparty. Instead, participants create their own process for allocating credits to account holders. This post summarizes the policy and compiles Vermont community solar resources .... Read More



#### New Funding Enables Expansion of Community Broadband Efforts in Vermont

L by H Trostle | Date: 21 May 2019 | F 💟 🥳 🔤



The Vermont Public Service Department awarded ECFiber, a community-driven effort of 24 different towns focused on bringing broadband access to rural Vermont, with about \$63,000 in grant funding. ... Read More



#### CUDs Lead Affordable Fiber Revolution in Vermont

1 by Karl Bode | Date: 21 Dec 2022 | 4 💟 💣 🔙







When it comes to affordable broadband, Vermont has always been a trailblazer. From early adoption of municipal broadband and cooperatives to more recent experimentation with CUD (Communications Union District) fiber deployments, the state's ..... Read More



#### Vermont Public Radio Interviews Stacy Mitchell on Amazon's Stealth Takeover of Vermont

1 by Nick Sturno-Langer | Date: 13 Nov 2017 | F | 6 |

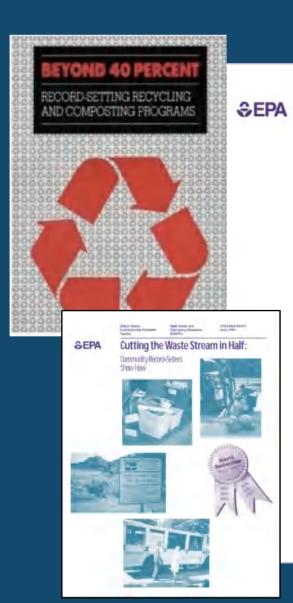


In the News: Stacy Mitchell November 13, 2017 Media Outlet: Vermont Public Radio's Vermont Edition During ILSR's co-director and Community-Scaled Economies initiative director Stacy Mitchell swing through Vermont to discuss Amazon at two events at independent bookstores, she spoke on the public affairs radio show Vermont Edition on Vermont Public Radio, Here's the details from the post, make sure ... Read More









United States Environmental Protection Agency Solid Waste and Emergency Response (5306W) EPA-530-F-98-023 September 1985 www.epa.gov/cqw

Waste

Reduction

#### Don't Throw Away That Food

Strategies for Record-Setting Waste Reduction

The Waste Roduction Record Settern Project Totales diversignment of assupptional would evaluations programs by discontenting successful ones. These programs can be used on models for other imprementing their own programs to reduce garbogic. This first sheet packet is orionted Seward commercial and institutional Facilities and generators, and highlights record setting body mooney programs.

#### Food discards: what are they and where do they come from?

and discards (fixed dis-kinds) food preparation wastes and unesten food from households, commercial establishments, institutions, and industries.

Major generators restaurants, supermarkets, produce stands, school cafeterias, hospitalis, food processors, firmers, hotels, misons, employee lunch rooms, and community events.

Examples leftovers, outdated bread, wilted lettice, surplus canned goods, vegetable peets, and fruit pits.

#### Why recover food discards?

A coording to the U.S. Department of Agriculture Economic Research Service, 1 9% of consumes, versal, and food service food discass from 1995 were recovered, sovings from Landfül cobis alone would be about 550 million dollars annually. Percovering 9% of losses from these three sources "would represent the equivalent of a day's food for each of 4 million people." I fould discards comprise 6,7% by weight of the total U.S. manifolds boild waste stream. In 1995, 14,000,000 tons of food discards were generated. Of this, only 4,1%,600,000 tons, was diverted, or recovered, from the traditional disposal destinations of landfills and inchestors."

Almost any business can successfully create fewer discards by buying less, and can divert food discards from landfills. Businesses with record setting food diversions programs are recovering 50 to 100th of their food discards and reducing their avesalt solid waste by 33 to 85%. Often, recovery of food and other organics is just one part of a successful overall waste reduction program that realizes both environmental and economic benefits. Your program can altaw you to.

- . Await trash collection and disposal fees:
- Provide food to the needy.
- Recover the nutrient value of the food as compact or animal food;
- Help your community meet local and state waste reduction goals;
- Sustain local industries and jobs; and
- Create an improved public image for your business.

#### Model Programs — Diversion Strategies and Rates Marretals Collected Reserve-Setting and Other (tims per year) Del Mar Fairgrounds Off site correlating; Discards from fair fond wenders, pager rendering and fruit screep and other discards from an othe letythen coulding of Filescher Allen Health Off-site composting: Kitchen Busi prep discords leli overs rendering; constiting from steam tables, greate edible produce Frest Valley VMCA, 100% On-site composting All pre- and prot-consumer fred 52% straps and leftovers Green Workplace Offishe composting. Fire- and post-consumer discuss from SAMPLEYING. Unione. Program, Covernment or-siz omposting If government restaurance and #70 (1995, esc) 90% Larry's Markets Off-site inmounting Produce and flural trivenings and 64% Westington rendering; donations spoils, wested carditions, meet and firm trimmings ramed goods Military College. On-site atmosting fliction food prep dracards and post-constitute from carinteness and 201 (1796) 75% SPE. mad burn, want corrugated On old composting at 30 New York State Kitchen food prep discards, past-6,200 (FV97) R066 Dicklives off-site ransumer leftoven including chicken Department of composting at 17 facilities bones, some sites accept paper to and mixed cardboard. Generios y animai fend Edible non-salable protoco; inedible 1,500 Dune 1996 off-site campositing Strie from Recycling Frouram. produce, sported produce and Off-site composting: 3,000 (1997) Shop-Riter Floral and produce trimmings and Supermarkets Nev septions, saled paper products, foud splis, out-of-date dury and deliprotucts, wanted commatted cardinare. meat products to luner food prep sorsus, pre--Arris concurred without and concurred Sentember 1996 discards Aumie (WII)







### Fighting the proliferation of dollar stores





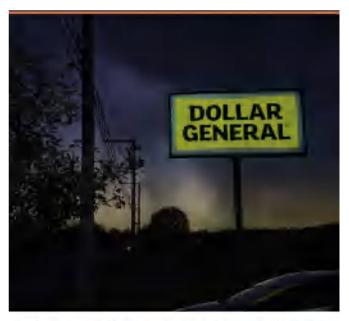
Report: Dollar Stores Are Targeting Struggling Urban Neighborhoods and Small Towns. One Community Is Showing How to Fight Back.

It's not easy to buy groceries if you live on the north side of Tulsa, Okla. This predominantly African American part of the city sprawls for miles and yet does not have a single, full-service grocery store.

BY STACY MITCHELL AND MATHERIOTANHUE | DATE: E DEC 2016 | F 🖸 🐯 🗔

For many of North Tulsa's residents this means their best option for buying groceries close to home (and really, their only option) is a dollar store. There are dozens of those, Dollar General, together

https://ilsr.org/dollar-stores-target-cities-towns-one-fights-back/



#### The Dollar Store Invasion:

Communities are in Revolt, But the Chains' Predatory Tactics Also Call for Federal Action

By Stacy Mitchell, Kennedy Smith, and Susan Holmberg. March 2023



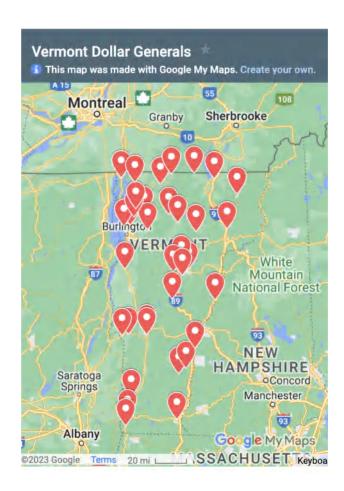
https://ilsr.org/report-dollar-store-invasion/







## Rural areas & small towns prime target







The spot where Dollar General is proposing to build a new retail store it currently being used as a corn field.

ST. ALBANS - Is a Dollar General coming to St. Albans?

Plans for a fifth Dollar General in Franklin County moved through St. Albans City Council Monday night when councilors approved an extra-territorial water allocation for the retail store, potentially to be located on state Route 104.

A Dollar General spokesperson, however, said the company is still figuring out its approach.







### Challenges to advancing organics recycling

The lack of infrastructure

**Access to land** 

Funding & financing

**Permitting & zoning** 

**Contamination** 

Rules that favor disposal and/or privilege large industrial sites)

OR that don't prevent that privileging

Lack of holistic food systems approach







Most important 5 letter word to recycling (not too long ago)?

### CHINA

Most important 5 letter word to composting?

### LOCAL







## Why local composting?

- Provides composting capacity when none exists and is cheaper, quicker, and more in line with community values than large and industrial composting facilities.
- **Engages and educates communities** in composting and zero waste practices.
- Increases demand for and interest in composting.
- Enhances local soils and local food production.
- **Supports farmers** (urban and rural).
- **Empowers and strengthens communities** by bringing people together and providing useful skills and jobs training.
- Often serves overlooked/under-resourced communities.







# What is community composting?



**COMMUNITY COMPOSTING** keeps the process and product as local as possible while engaging the community through participation and education

# **EPA Food Recovery Hierarchy**









# Food Recovery Hierarchy Codified in VT Law?

#### Vermont's Priorities for Food & Food Scraps







# Composting, lots of ways

























# Composting, lots of sizes















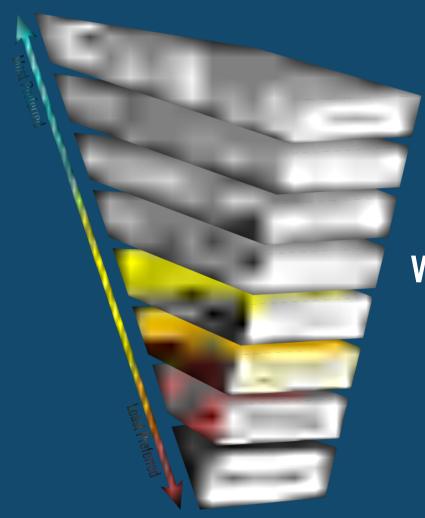








# What about local? Scale? Diversity?

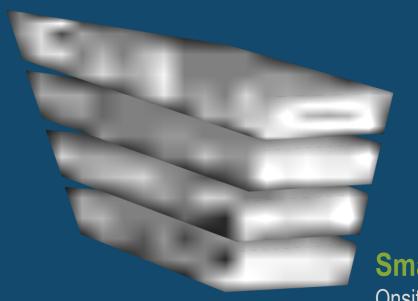


Hierarchy to Reduce Food Waste and Grow Community





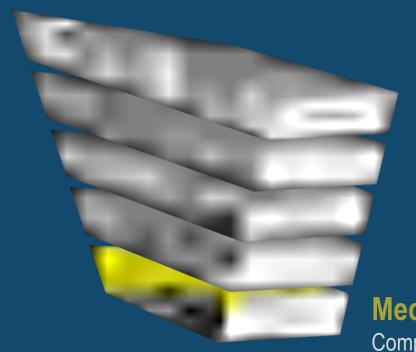




#### **Small-Scale, Decentralized**

Onsite composting or anaerobic digestion, and community composters can accept material from off-site or simply process their own material.



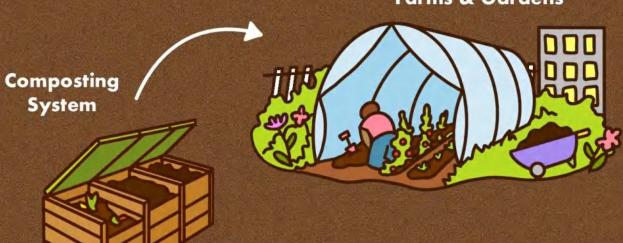


#### Medium-Scale, Locally-Based

Composting or anaerobic digestion at the small town or farm scale. These systems handle typically between 10 and 100 tons per week and are designed to serve small geographic areas.







Fresh Local Produce



The Closed Loop of Community Composting



Meal Preparation







### Benefits of on-farm composting

- Recycles nutrients and organic matter from farm residuals & more
- Facilitates the use of compost in agricultural soils
- Farmers
  - have equipment that can be repurposed for composting
  - may be able to produce compost less expensively than purchasing
  - can tailor their composting recipes for their specific needs
- May provide additional sources of income for farmers (tipping & sales)
- Provides an opportunity to engage community
- Contributes to circular food systems & diversified composting infrastructure







### Compost Crew - Rockville, MD

Curbside collection in DC, MD & VA

Small-scale composting site on a local organic farm

Committed to a closed-loop system

POT: 3162794







Image sources: Instagram @\_compostcrew https://compostcrew.com/







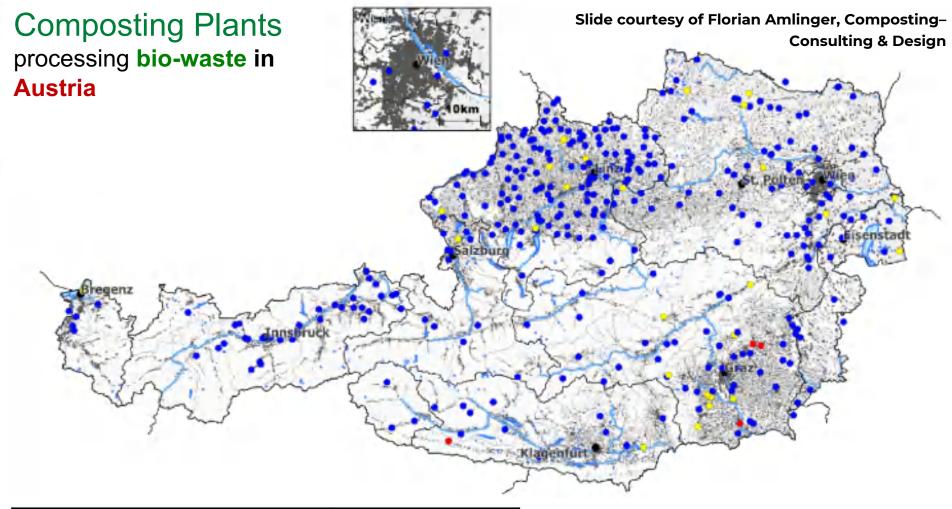
# **Spurring On-Farm Composting**











Number of plants	405
Treated bio-waste & sludge	1.3 Mt = 145 kg/person
Average treatment/plant	3 200 t

From total 1.6 Mt / 180 kg / person source sep. org. waste

~ 22 000 / person / plant





### How to expand on-farm composting

- Clear definitions, rules, & pathways for scaling up responsibly
- Composting as an approved farm-related activity
- Source separation & keeping clean feedstocks clean!
- Quality standards for compost & all soil amendments
- Technical training & assistance (for farmers, farm service providers, regulators)
- Demonstration projects, farmers learning from farmers
- Partner with research institutions for research, field trials & demos
- Financial support for start-up costs
- Public education & engagement

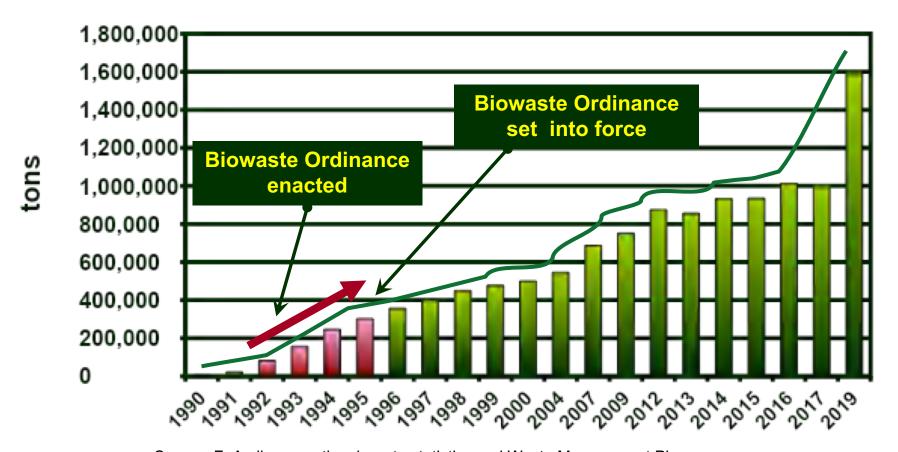






#### **Separately Collected Biowaste**

The regulatory driver for introducing separate collection and recycling of biowaste



Source: F. Amlinger; national waste statistics and Waste Management Plans

### How to expand on-farm compost use

Figure 10. Percentage of Incentives Projects Implementing Each Practice (2017-2020)

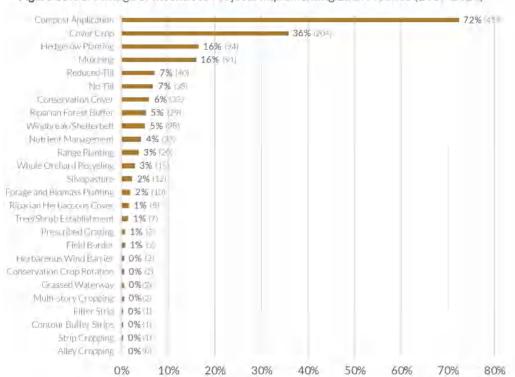
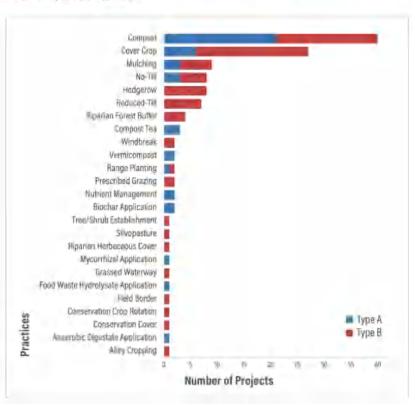


Figure 4. Number of Demonstration Projects Implementing each Practice, 2017–2021.

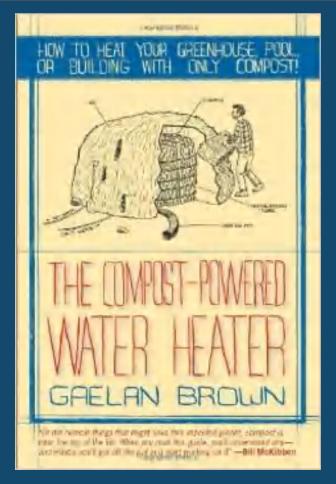


Source: CalCAN California Healthy Soils Program Progress Reports (2020, 2021)













Composting to Recover Heat, Build Soil and Grow Food







### **ILSR's Composting for Community Initiative**



# On-Farm Composting & Compost Use Webinar Series

On-Farm Composting Fundamentals (Aug 24) with Dr. Robert Rynk

Integrating Composting Into Your Farming Business (Sept 14) with Ellen Polishuk Composting Recipes & Integrating Food Scraps (Oct 5) With James McSweeney

Compost & Soil: Restoring Health & Rebalancing the Climate (Oct 26) Calla Rose Ostrander and Jean Bonhotal Profiting With Compost & The importance of Compost Quality (Nov 16) with Dr. Greg Evanylo and Gayne Marner Senecal

Compost - Soil - Plant: Putting the Many Facets Together (Dec 7) with Dr. Will Briaton

Find out more at ilsr.org/on-farm-composting-webinar-series















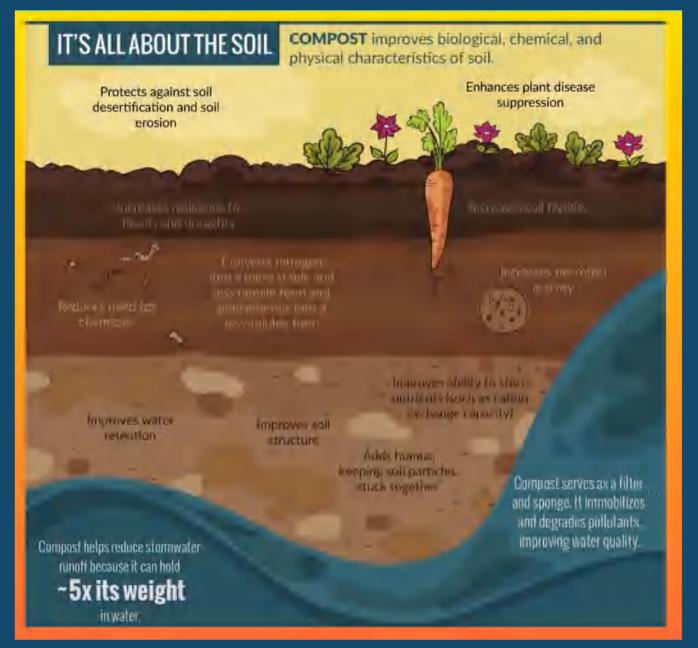
# LEARN TO For healthier food, healthier soil, COMPOST healthier communities.



Celebrate International Compost Awareness Week (May 7-13) with FREE enrollment for ILSR's self-paced online course

**Community Composting 101!** 





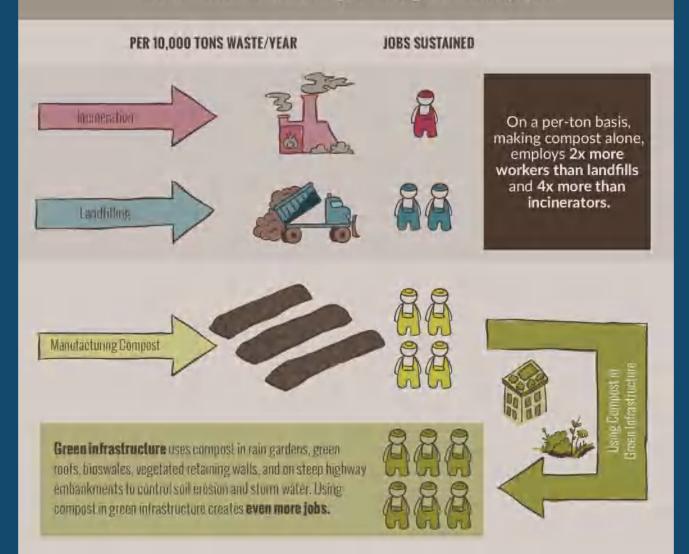






#### **Composting Creates Jobs**

Jobs are sustained in each stage of the organics recovery cycle.











https://ilsr.org/infographics-compost-better-planet/







#### **HOW COMPOSTING COMBATS THE CLIMATE CRISIS AVOIDS WASTE OUTCOMES** WITH HIGH EMISSIONS Landfills are the third-largest 20x the CO2e amissions (as methane) as composting source of human-related methane emissions in the U.S. ENHANCES SOIL QUALITY Compost increases: Numinus in soil Water helding Grows healthier, more nutritious plants & food Increases soil resiliency to extreme heat & flooding Reduces use of synthetic nitrogen & fossil-fuel-intensive fertilizers Soil aggregation Prevents erosion & runoff, thus protecting & restoring waterways Normally it takes 1,800 years to build 6 inches of topsoil but with compost, it takes only 6 months SEQUESTERS CARBON 1.5 trillion **BUILDS COMMUNITY** RESILIENCY Healthy soil = Profitable farms Local jobs Community Environmental education **Enhanced habitat** Community bonds & safety Physical activity & healthy diets Social inclusion & empowerment

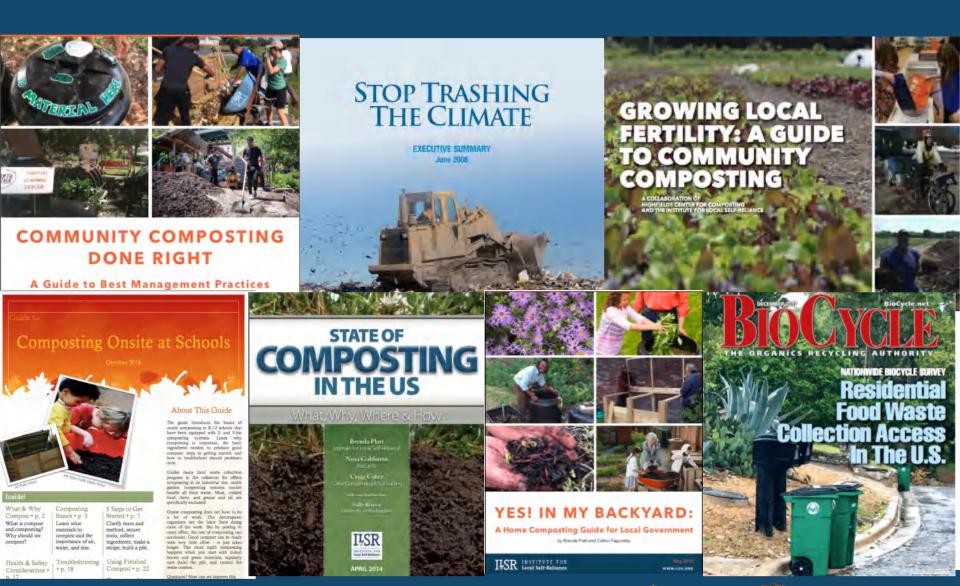
ilsr.org/compost-climate







### **ILSR's Composting for Community Initiative**

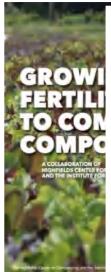








# **Growing Local Fertility: A Guide to Community Composting**





the school of

#### Ferrisburgh Central School, Ferrisburgh, VT START DATE: 2010

the school food street DRIVERS: Fifth and sixth grade students were learning about recycling, garbage, and landfills; they realized they were not sensolat, and a maleful composting at their school and began a conventation about it. force manuer. The anitally parent voluntains having the food scraps off site, until the

polar to feater for temperatures, may discountly dead of water and they report temperatures over 150 F in January. The system designs, created by Highfields Center for Composting, were the original prototype for the open source design guide now available on the Highfields' website.

design and helping with permits for the operation. The community

composting program has been in operation since 2011.

FARM & COMMUNITY COLLECTION INITIATIVE - RUBAL

#### Close the Loop! St. Albans, Northwestern, VT

DRIVERS While the Northwest conner of Vermont is used your like town of St. Albams and the surrounding region generates a significant. Close the Loopi St. Albams is an example of a vision initiated by

border from St. Albans in Swanton. To vegetable and berry production requi and cover cropping to maintain crop Food scraps collected from the core farm, solve a weste management chall replenishing the farm's soils with orga

PARTNERS: Northwestern Vermont S Huclak Farm, Highfields Center for Co Academy and other food scrap gener

COMPOSTING METHOD: Turned with

VOLUME: In 2013, the farm processe residuals. Composting will require -2 feedstocks and produce - 1 000 cubic The program and composting operat

SUMMARY: The Hudak Form hou composing facility. NWSWD collects businesses including Ben & Jerry's, Bellows Free Academy Namburat Moderal Caster St. Alberts City School, Harmeford's and Georgia Benentary The Highfields Center for Composting supported the development of Close the outreach and training of food scrap generators in the region.

and by providing compost site

and more than 20 boureases and achools. It is on track to double and triple in coming years.

PUNDING: Funding for the program has come from a marries of sources including individuals and private business. Numbers Kingdom Solid Weste Management District (NEKWMD) the Vermois Agency of Natural Resources, and private foundations

WERSITE http://highfieldscompasting.org/risk/ram

RESOURCES: http://inglifieldscomposing.org/news resources/

composting



#### The Farm Between, Jeffersonville, VT

The Same START DATE: 2017

DRIVERS: The Farm Batween exemplifies equipocal growing practices to predice cold herely organic hurs, has nursely plants, and popular value added hus products like hus purps. Capturing local book screen acquires the form with chicken head, offsetting systems to increase and health end crop productions. The farm in ocaled in rural Winmont, which generates a low directly of food

> prior to the patient system. PARTNERS: Johnson SONOOL Hathaite Center for

VOLUME Interplat

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#### Lake Region Union High School, Orleans, VT

extent collect and process load scraps and other organics.

Johnson Elementary Schools, The Ma Icafe), Cambridge Village

the farm collects food scraps from penerations in 32-call hoters.

Swelley or more obsert freedadt, blanded with additional radio

I lies cales but had START DATE 2014 minuted for a company

DETVERS: This 600 market bish school has an Americanian Department that sleeded to diven the entire school's food scrept by composing the material on campus to return to the school's parties, greenhouse, and orchard.

PARTNERS: The Acriculture Department at Lake Region is facilitating this project, led by Maxwell Verhouter. The program involves -50 students, although a core class of -12 will reainly monitor the system.

is task and bidges | COMPOSTING METHOD: in versal drug

come with dealing with feet VOLUME: The school produces -3 tons of food scraps per year high school is find usuate to a which will be incorporated with approximately 40 cubic yards of managed uses. The reduced after materials is year. An estimated 10 cubic yards of compost will unid works in ruples - the be produced

usion caria, communitie, and SUMMARY: The school has volunteered to pilot a prototype in

im ruple of being prompter: wessel composting system concept developed by Highfields that

exi. The prototype design will be tested by the school and the shared in an open-source composting forum on Highfields wells site (pending testing). The program will teach the students hands on and technical expects of composting as well as give them an concertable to least field type for elementary students coming to learn about composting and gardening. While this project is still in the pilot stage and being developed.

is being designed and built by a local vacutable farmer named

Richard Hudak and his engineer and carpentar sons. Yuri and

is worth sharing some of the system's unique design concepts. The entire system uses under \$5,000 in materials and could be modified Asses shown in turned by hand with a heat life crank. The struct is closely encased in an insulated shed, which can be removed in high from the connectation process. The bottom has the contential for a greenhouse roof, which would be heated passively through the composting process. The goal of this feature is to extend the promise stands and to cost in electric that would otherwise he lost

FUNDING: This project is premarily funded through a USDA rural busingment grant procured by Highfields Canter for Commission To supplement the funds, Lake Region received a strant through the

The project was still enstartup phase as of March 2014. We include it because it is a unique model with many laplicable aspects and because we want to highlight projects supported by the USDA as part of the Roral Development Grant that funded this Guita to previously Composting

CONTACT: Manuell Vanhouter

GUIDE TO COMMUNITY COMPOS

foregita's real

pre brure's pell's gight

COMPOSTING METHOD: Windraw compositive (in conjunction

with feeding food scraps to chickens)

up at Apple Ledge will allow for an average of 52 tons of food scraps per year to whole 150 expire vards of feedstocks and animal bedding. Approximately 70 cubic yards of correct is expected to be

SUMMARY Feeding food scraps to the Ledge Farm will happen in two dist

WERSITE: www.virneo.com/78850005 CONTACT: Ned and Jana Loveing







SARAUS COMMUNITY COLLECT

Close the Loop! No

Disserting Local MEET of STD

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DRIVERS: Close the Loop! NEK's part of

develop community based local compor

designed as a model for a rural, distribut

scrap recycling network and partnership

will improve food security and profect or

PARTNERS: Highfields Center for Comp

at Tamariana Farm, Wise Worm Composi-

Windhester Farm Lake Region Union Ho

Nonhaut English of recycling all of Vermont's Good scraps

Farm IV William while contributing to the local economy

COMPOSTING METHOD: Window lab

## **Composting for Community Map**



ilsr.org/composting/map/







## Peels and Wheels Composting - New Haven, CT

Pedal powered collection service.

Neighborhood-scale operation that composts wasted food from households, schools, and small businesses.

Composts materials at its Phoenix Press Farm and other farms and gardens – created in partnership with New Haven Farms.

Provides training & education, and zero waste events.







### The Community Compost Depot - Providence, RI

Local nonprofit of innovators and pioneers in local composting solutions.

Their mission is to make composting options and know-how accessible to everyone, and eliminate barriers that keep people from saving food scraps for composting.

They pioneered food scrap drop-off depots and urban composting in Rhode Island.







## Park City Compost Initiative - Bridgeport, CT

Started as a neighborhood composting effort to reduce incinerator pollution.

Expanding from community garden site and pilot level to new property with larger capacity

Building bins and teaching high school students how to compost.







### Groundwork RI / Harvest Cycle Compost - RI

Harvest Cycle uses an electric assist cargo bike to collect food scraps from residences, restaurants, and institutions.

Composts for urban growers in the community.

Involves Groundwork's youth and adult employment programs in collection, processing, and food growing operations.















### **Bootstrap Compost** - MA & RI

For-profit social enterprise

Education is core element of mission

Founding value: "give back to community what we take from the community"

Through partnership with nonprofit
Triangle, Inc., put people with disabilities to work in its warehouse















## **CERO Cooperative** - Dorchester, MA

A bilingual, multicultural, worker-owned cooperative

Provides commercial organics collection services to businesses in metro Boston

Contributes to local environmental justice and zero waste efforts

Image sources: instagram @cero.coop, https://www.cero.coop/















## Black Dirt Farm - Northeast Kingdom, VT

Blck Dirt Farm is a diversified family farm that collects food scraps from the community, forages hens, makes compost and worm castings with the excess food and manure, and uses them to nourish its soils and crops.

Image source: Lisa Liotta, Central Vermont Solid Waste Management District; Black Dirt Farm; and *This Farm Turns Garbage into Food* video (https://www.youtube.com/watch?v=dq-TkB8zZsI)

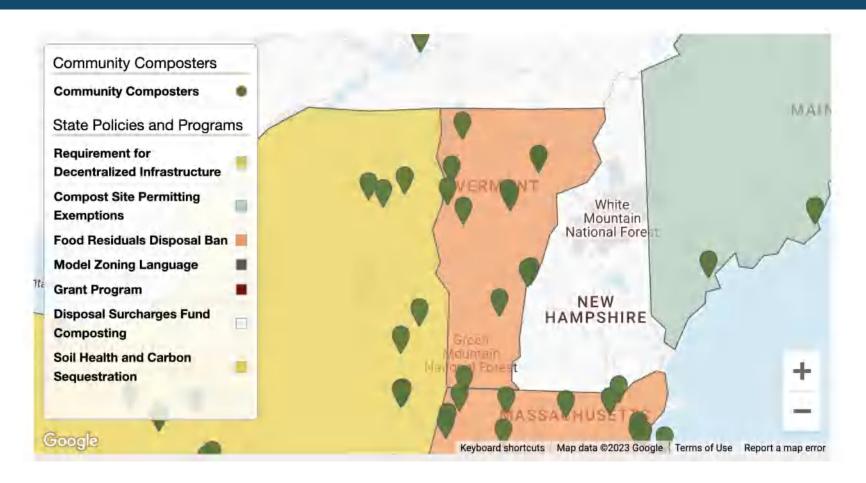








### **Vermont**



ilsr.org/composting/map/



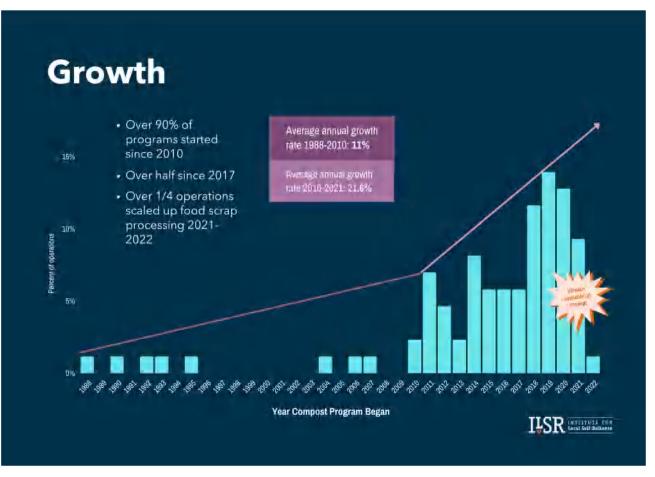




# Community-based composting is growing



https://ilsr.org/composting-2022-census/



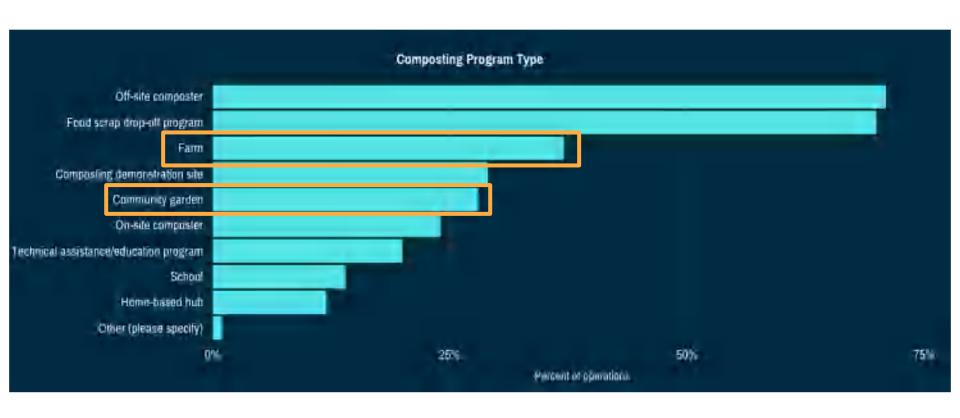






### **Snapshot**

### **2022 Community Composter Census**









Windrow

Bin system

Vermicomposting

Static pile

Forced aeration

Passive aeration

**Batch system** 

In-vessel

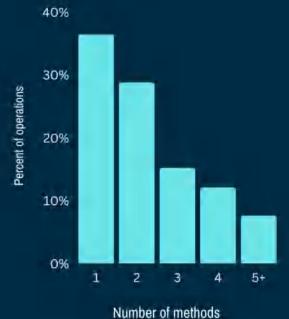
**Tumbler** 

Bokashi

**Continuous flow system** 

& more





Number of memous







### Composting Sources (Left) and End Uses (Right) for 2022 Community Composter Census Respondents:

### Sources for over 65% of respondents:



69% Residential curbside collection



78% Residential drop-off sites



78% Restaurants, cafes & bakeries

### End use for 85% of respondents:



Gardens (home-based & community gardens)

#### For around 50% of respondents:







Donate/ give-away



Client give-back

Over 50% of respondents:

20% - 46% of respondents:



Events



Offices

- Supermarket chains
- Small grocery stores
- Hotels/resorts/ retreat centers
- Universities/colleges
- K-12 schools
- Farms/agriculture
- Community gardens



30% - 45%:

10% - 20%:

Public

spaces





On-site use



#### List Cineted

Topsell & turf dressing

INSTITUTE FOR Local Self-Reliance

Source: A Growing Movement: 2022 Community Composter Census, Institute for Local Self-Reliance, 2023 [lisnorg/composting-2022-census/].

# **Community Impact**





of composting sites located within areas served by collection





use some, most, or all of their product on-site





provide community engagement opportunities



76%

have active employees





## **Many Co-Benefits of Local Composting**



### Public health benefits

- Increasing food security & expanding access to healthy food
- Encouraging outdoor & physical activity
- Promoting psychological well-being
- Mitigating air, water, and ground pollution
- Greening 8 beautifying neighborhoods
- · Mitigating the heat-island effect



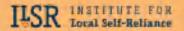
### Community-building benefits

- Providing community gathering spaces & opportunities for connection
- Fostering social support networks & safety nets
- Increasing prosperity for local farmers
- · Encouraging local stewardship
- Creating opportunities for marginalized groups (such as engaging at-risk youth or providing jobs for people with barriers to traditional employment)



### **Environmental benefits**

- Promoting environmental awareness & education
- Co-benefits to local compost application such as increased flood control, erosion control, & more

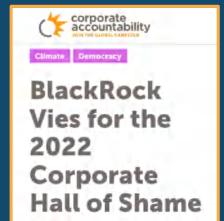


# Trend: large, centralized & consolidated









### BlackRock.

Vanguard Renewables Announces Acquisition by BlackRock Real Assets

Partnership Will Fuel Vanguard Renewables' Organics-to-Renewable Energy Expansion Plan

BOSTON - July 20, 2022 - Vanguard Renewables, a U.S. leader in organics-to-renewable energy, today announced that a fund managed by BlackRock Real Assets has acquired the company from Vision Ridge Partners. BlackRock Real Assets will partner with Vanguard Renewables' management team to build upon the company's market-leading track-record and drive its next phase of growth, including its plans to commission more than 100 anaerobic diseasers to produce renewable natural was across the country by 2005.

Since its founding by John Hanselman and Kevin Chase in 2014, Vanguard Renewables has been changing the perception of U.S. food waste and how that waste can be recycled into renewable energy to benefit the planet The company mitigates greenhouse gas emissions from food waste and cow manure through two distinct.

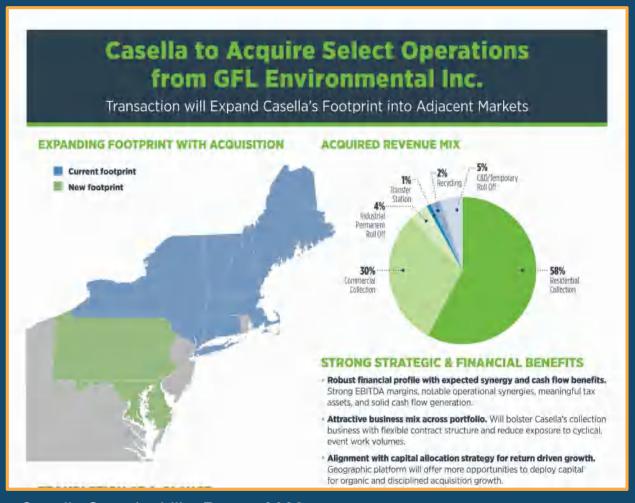








# Trend: large, centralized & consolidated



As of Monday (4/24/2023), Casella announced expansion into the Mid-Atlantic as part of a \$525 million acquisition from GFL

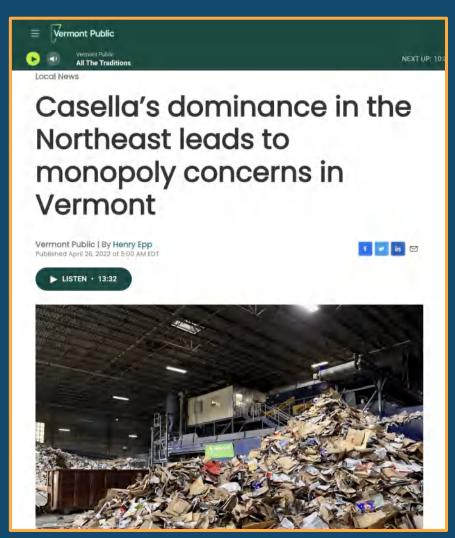
Casella Sustainability Report 2022: https://sustainability.casella.com/sites/default/files/2022-10/Casella-REPORT-Sustainability2022.pdf?utm source=PDF

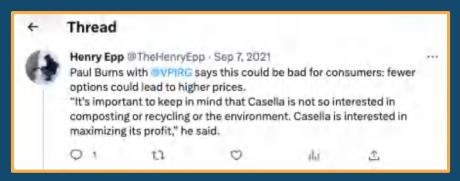






# Trend: large, centralized & consolidated













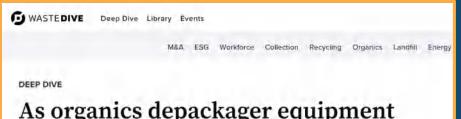
# Trend: depackagers & large sites compete with local operators







## Trend: more depackagers



As organics depackager equipment market grows, so do concerns over microplastics contamination

Companies like Vanguard Renewables are investing millions to facilitate commercial organics recycling as researchers and regulators work to keep PFAS and microplastics out of the equation.

https://www.wastedive.com/news/v anguard-microplastics-digestioncompost-depackager-pfas/626797/

Published Jul

By Elizabeth



When asked about microplastics contamination concerns during the tour, Hanselman said that America has an addiction to cheap food wrapped in plastics — and that it would be challenging to eliminate microplastics from the organic waste stream until the amount of plastic packaging is reduced. Vanguard has talked with grocery store clients about using more cardboard packaging when possible.







# Trend: more depackagers



https://www.wastedive.com/news/v anguard-microplastics-digestioncompost-depackager-pfas/626797/

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Proponents say depackagers can increase the overall amount of organics being recycled by cutting down on the labor needed to hand-separate spoiled food from packaging. But as the sector expands, so do concerns

"It's better to keep our (organic) materials clean and segregated to have higher value end products," said Brenda Platt, director of composting for the Institute for Local Self Reliance. "You know — garbage in, garbage out."

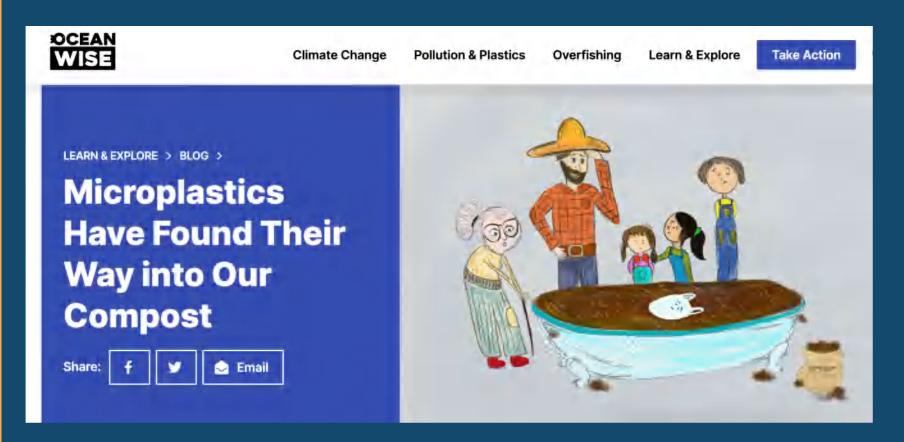
closer look at the issue.







## Concerns about microplastics & PFAs



# A bathtub full of compost would contain 1 plastic grocery bag equivalent of microplastics

Metro Vancouver Solid Waste Division (BC) research on microplastics in compost: https://www.ocean.org/blog/microplastics-have-found-their-way-into-our-compost/ (Nov. 2022)







## **Concerns about microplastics & PFAs**









# VT ANR Draft Policy for Source Separation of Food Residuals & Heavily Packaged Food Residuals

After considering applicable statute, the intent of the Universal Recycling Law (Act 148 of 2012), the recommendations made by the Act 170 Stakeholder Group and evaluating the environmental impacts of food residuals management strategies being employed across the state including the value of source separation, it is the Agency's policy that source separated food residuals shall not be mixed with heavily packaged food residuals at the point of generation.







# Say NO to single-use



### Vermont Says NO To Single-Use Plastics

News and Updates, Victories, Zero Waste / By Emma Huvos / June 17, 2019









# Single-use foodservice ware has got to go!

Business, Economics and Jobs

# This Indian meal service is so efficient it's the envy of FedEx

#### GlobalPost

July 15, 2014 - 4:35 AM UTC

Sumi Somaskanda and Mandakini Gahlot





It's an everyday miracle: Dabbawaias deliver home-cooked lunches to workers all over the sprawling, crowded city of Mumbai. And they (almost) never get it wrong.

Credit, indranil Mukharjee

https://theworld.org/stories/2014-07-15/indian-meal-service-so-efficient-its-envy-fedex







# **Community Crockery Bank**



### CrockeryBankGurugram @BankCrockery · 26 Dec 2018

A new branch in NOIDA. A step closer to sustainable living. Thankful to everyone who have supported and used the utencils from Crockery Bank for Everyone. 150000 disposable saved and number is rising everyday. A simple, replicable and doable idea.





2



8



18









# **Community Crockery Bank**



CrockeryBankForEveryone @BankCrockery · Jun 22

#### #Anniversarypost

5 years completed. It been a wonderful journey, positive stories, wonderful people, passionate eco saviours consious citizens, committed crusaders, positive media and so on. Now we have around 32 teams actoss the country and have been able to save 5,85000 SUP



CrockeryBankForEveryone @BankCrockery - Jun 15

When you get videos like this, its overwhelming and rewarding at the same time. felt delighted to see them connecting to the roots, enjoying simple moments and having fun of playing with water. Bonus point here is learning a life skill.



@bankcrockery







SEVEN DAYS

It's time to pick

NEWS ARTS+LIFE HOME+DESIGN

FOOD CANNABIS MUSIC ON SCREEN EVENTS

SPECIAL REPORTS + Housing Crisis Health Care

GUIDES + Kids VT Staytripper Best of Verm

NEWS + OPINION » TRUE 802

### Tiny Hardwick Breaks a **Dishwashing World Record**

By SASHA GOLDSTEIN

Published May 31, 2017 at 10:00 a.m. | Updated May 31, 2017 at 11:59 a.m.



https://www.burlingtonfreepress.com/story/news/local /vermont/2017/05/27/vermont-breaks-world-recorddish-washing/348392001/

https://www.sevendaysvt.com/vermont/802-much-dirtydishing/Content?oid=5960214

### Vermonters shatter record for simultaneous dish washing



**April McCullum Burlington Free Press** 

Published 7:02 p.m. ET May 27, 2017









"Our new slogan is 'a community that washes dishes together stands together," said Tom Gilbert, who came up with the idea as a board member for the Center for an Agricultural Economy. "We're building pride around washing dishes."



Hardwick residents gather in a local park to attempt to break the world record for simultaneous dish washing on Saturday, May 27, 2017. APRIL MCCULLUM/FREE PRESS











# Learn from single-stream recycling & from trends in other states

- Source separate!
- Don't privilege dominant corporations or large industrial sites
- Be wary of depackagers
- Avoid contamination





Stop Privileging Large Industrial Sites Over Local Composters — Episode 125 of Building Local Power







## What role should compostable ware play?

Resource Library: why compostables and bioplastics aren't the answer







https://upstreamsolutions.org/why-compostables-and-bioplastics-arent-the-answer







## **Reuse Is Taking Off!**







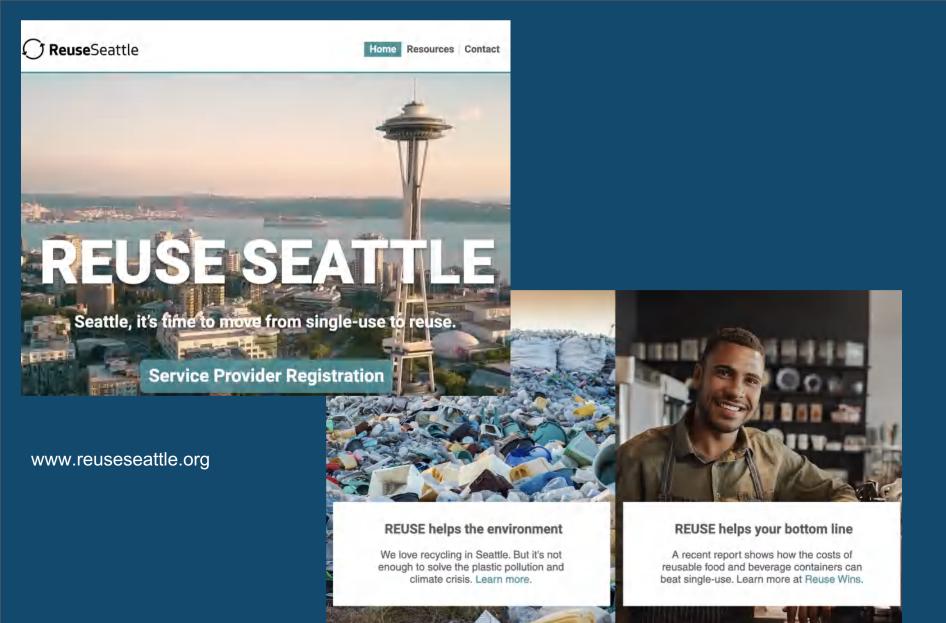




















### Funding to Reduce Foodware Waste

Up to \$25,000 per applicant for dishwashers, reusable dishes, and other eligible expenses

This grant program provides funds to local food-serving businesses and organizations for selected projects that result in a long-term transition from disposable to reusable foodware.

This can be for dine-in and/or takeout operations at restaurants, food halls, cafeterias, nonprofits, and more.



Scan for more information and to access the application, or visit: doee.dc.gov/disposables



Questions? Contact: Kacey Wetzel
(410) 974-2941 ext. 104 | kwetzel@cbtrust.org

























### What can you do?





- Dismantle monopoly power
- Foster diversified infrastructure (with policies, investment, procurement, partnerships, technical assistance, tools)
- Focus on protecting soils (eliminate contaminants)
- Reserve depackagers solely for packaged goods
- Contract with micro haulers and processors (urban & rural farmers too)
- Incentivize farmers to maintain high levels of soil carbon
- Support phase out of single-use plastics
- Embrace a holistic framework: Local food systems • community -> creating strong local communities



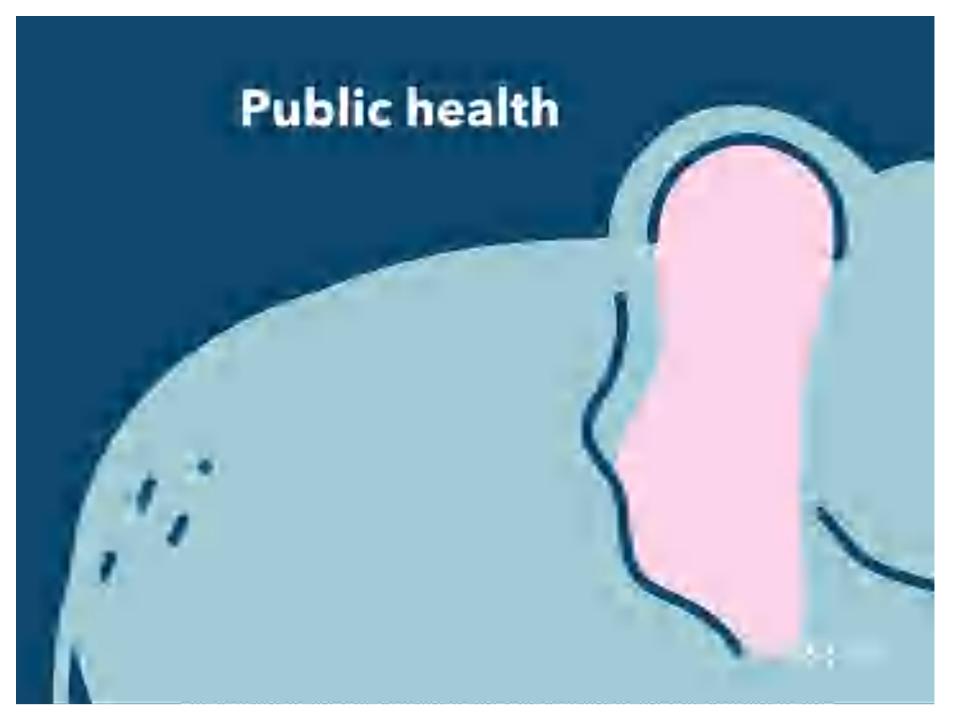




## Healthy soils









# Community building



#### Zero

Closed loop

waste

Closing incinerators & landfills

5mall businesses

**Economic** development

Green jobs

Public health

> Food security

> > Healthy soils

**Organics** recycling

Agriculture

Cutting plastics Greening

neighborhoods

**Emissions** reductions

> Mitigating climate change

> > Climate resiliency

**Environmental** education

Community building









## Thank you!

