

BENEFICIAL REUSE OF FOOD SCRAPS

A 3-Pronged Program to Tackle This Substantial Solid Waste Concern

Food scraps comprise as much as 20% of the material households send to Vermont landfills, and they make up approximately 50%-60% of restaurant and cafeteria “waste.” But all of those food scraps are not really “waste” and more and more schools, businesses, and households are actively working to keep them out of the landfill. Doing so is one great way to help tackle global warming, since each ton of food scraps put into a landfill releases the equivalent of 6 tons of CO₂. Focusing on this sizable chunk of the waste stream can also really help to move the region along the path toward Zero Waste.

The CVSWMD Organics Program strives to both increase public understanding that food scraps and other organic materials (leaves, brush, etc.) don't belong in the landfill, as well as to work with schools, businesses, and residents to divert organic materials to beneficial reuse instead.

School Organics Program

Twenty schools in the CVSWMD have been trained to divert food scraps to composting since the program



Students from Union Elementary School visited Montpelier High School in May to plant lettuce in the school's solar greenhouse. The annual field trip is designed to educate the students about closed loop systems that incorporate composting, renewable energy, and the economic and environmental benefits of eating local foods. With the help of MHS biology students and teacher Tom Sabo, UES students transplanted organic lettuce seedlings into soil from VT Compost Co.—soil which the students helped to create through sorting their food scraps for composting at school each day.



Students, faculty, and staff at Spaulding High School (Barre City) began sorting food scraps from the trash in September 2009.

began, with seven new schools joining in FY09: Rumney Elementary (Middlesex); Hardwick Elementary; Hazen Union (Hardwick); Twinfield (Plainfield); Berlin Elementary; Walden Elementary; and Central Vermont Catholic School (Barre). Approximately 7,000 students, faculty, and staff took part in the program during FY09, diverting an estimated 90 tons of food scraps. **Participating schools have diverted an estimated 278 tons of food scraps since the program began in April 2004.**

The compost monitor positions have proven to be a critical step in ensuring school program success and the District hired nine part-time monitors to work in newly participating schools during FY09. The monitors work a short lunchtime schedule to ensure that proper food scrap separation occurs in the cafeteria, to help troubleshoot any problems, and to be the District's “eyes and ears” for how the program is working in a particular school after the school-wide training is complete. Most of the monitors are parents of students or are community members already involved in the school community, and their presence brings a familiar face to a new school program.

Participating schools have also used the program as a platform for reinvigorating cafeteria and school-wide recycling programs, and some schools have replaced disposable cutlery, plates, and cups with durable items to further reduce waste. The District is excited by the possibilities that this renewed commitment to waste reduction is bringing to the schools and we expect to help participating schools develop more comprehensive waste reduction programs and policies as opportunities arise.

Small Schools Pilot Results Available

The Small Schools Pilot Project was completed in spring 09, and a report on the project's findings was released. The report, entitled *The Small Schools Project: On-site Food Scrap Recycling Solutions for Community Facilities*, compiles the findings of the pilot project testing Green Cone food scrap digesters at small schools and research into the range of onsite, in-vessel food scrap recycling options available for schools and other programs with small populations (1-300 students) and an evaluation of available technologies.

Approximately 15% of public schools within the CVSWMD fall into this size category. As such, these schools are typically not good candidates for our existing School Organics Program due to the relatively small total amount of food scraps they produce on a weekly basis. The costs—both the financial costs of pickups and the environmental impact of picking up and transporting this small quantity of organic material from these schools—make the District's hauling program a poor match for small schools. This report is a great step in helping to guide small schools through the range of options available. It's available on the District's Web site on the "Green Cones for Small Schools" page.



Green cones in a garden in central Vermont.

Residential Program

This program aims to help residents manage food scraps where they are produced, rather than encouraging the collection and transportation of residential food scraps to offsite composting operations. Unlike most businesses and schools, households typically produce a fairly small quantity of food scraps that can be easily managed with a compost bin system and Green Cone

food scrap digester in the yard—without the greenhouse gas emissions inherent in a trucking program.

Compost bins and piles will effectively break down fruit and vegetable scraps plus leaves and other yard materials, while Green Cones are in-ground digesters that handle all kinds of food scraps, including meat, bones, dairy, and small amounts of oil. To encourage food scrap diversion at home, the District offers the following online tools: its free how-to compost booklet, *The Dirt on Composting*, and plans for making several styles of compost bins. The District also continued to co-sponsor Green Cone sales events in FY09 to help residents access the cones at an affordable price; 154 Green Cones were distributed this past year.

The District is currently selling Green Cones out of its office in Montpelier. If you're interested in purchasing a Green Cone, please call the office for more information.

Business Organics Program

During FY 2009, the 49 participants in the Business Organics Program (up from 39 participants in FY08) diverted an estimated 790 tons of food scraps to composting operations. **Since the program began in April 2004, business participants have diverted an estimated 2,605 tons of food scraps from the trash!**

We continued to work to expand the program in FY09, but much more slowly than the previous year as staff focused on bringing a new truck online and working out all of the kinks before increasing participant numbers too much. A much larger expansion effort is currently underway for FY10.



CVSWMD staff emptying food scrap totes at a Vermont Compost site. The new truck (below) eliminates the manual dumping needed with the box truck.



Fiscal Year 2009 Facts & Figures

Twenty schools in the CVSWMD have been trained to divert food scraps to composting since the program began, with **seven new schools** joining in FY09.

Approximately **7,000 students, faculty, and staff** took part in the program during FY09, **diverting an estimated 90 tons of food scraps.**

49 businesses (restaurants, grocery stores, workplace cafeterias) **diverted an estimated 790 tons of food scraps** to composting operations.

154 Green Cone food scrap digesters were distributed at sales events in the District.