



Food Scrap Recycling Program

Darien, CT

May 1, 2019

Program Summary:

In May 2018 the Town of Darien received an Innovation Grant (\$8,460) from the Recycle CT Foundation to establish a municipal food scrap recycling program. The program was successfully launched on October 15, 2018 and is ongoing:

- Any resident with a valid permit (sticker) to enter the Darien Recycling Center may participate in the program;
- The drop-off is clearly marked with signage;
- The program allows residents to recycle all food scraps, including items not typically composted at home (e.g. meat, bones, dairy, breads);
- The Town purchased food scrap collection kits in bulk and has sold them to residents at cost to facilitate participation (kits are not required to participate in program);
- Community outreach to publicize the program has included: a table at Darien's annual summer sidewalk sale, social media, press releases, news articles in



local media, town website, announcements at various town and community meetings and events;

- A compost "giveaway" is planned for a Saturday in May to enable residents to experience the benefits of the nutrient-rich soil amendment that results from composting food scraps.

Food scraps are hauled to a commercial composting facility, which permits residents to recycle all food scraps



The drop off is clearly marked and visible to residents

Program Administration:

- Spear-headed by the town's Advisory Committee on Sustainability;
- City Carting & Recycling manages Darien's Recycling Center with a staff of two and they oversee the food scrap collection area and hauling of material to a commercial composting facility;
- Department of Public Works measures and compiles data on weight of material collected;



Kits and rolls of compostable bags can be purchased through the DPW Office - Darien Town Hall

sale of resident collection kits and replacement (compostable) bags are also sold through this department.

Status Summary:

The program's goal is two-fold:

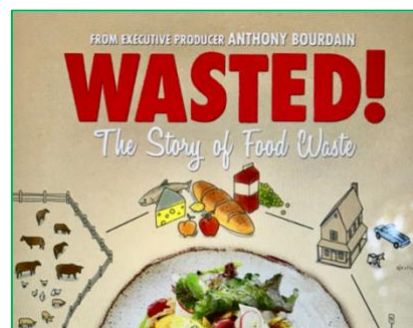
- 1) To reduce the amount of waste sent to – and incinerated at – the Wheelabrator trash-to-energy plant in Bridgeport, and to increase the amount of waste that is recycled and repurposed;
- 2) A secondary goal is to increase community awareness of, and reinforce community commitment to, recycling and sustainability.



Less MSW = less to incinerate!

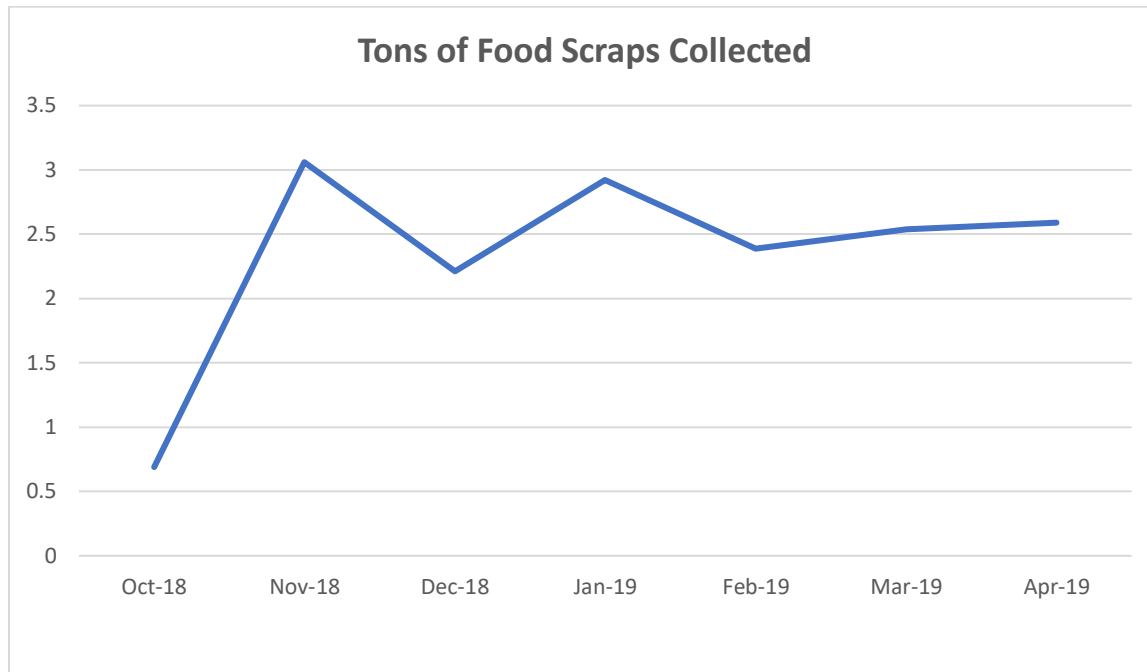


Food scraps are processed at Quantum Biopower, yielding both sustainable energy & compost



This award-winning film discusses several approaches to mitigating food waste and was shown at the Darien Library on October 24th

From October 15, 2018 through April 2019, more than 16 tons of food scraps have been diverted from the waste stream, with an average of 2.5 tons per month (0.59 tons per week).



The program is voluntary and residents need not register to participate; it is therefore difficult to calculate the exact number or percentage of residents participating. Nearly 200 residential kits have been sold to date (with more on order), and it is assumed that most residents who purchased a kit are source separating – and recycling - their food scraps. In addition, the purchase of a kit is not required to participate in the program, and some residents use their own Tupperware, buckets, bins and paper bags to collect and transport food scraps.



Budget Overview:

EXPENSES (TO LAUNCH)

Darien Sidewalk Sales registration	\$	150
Vinyl Banner (2' x 6')	\$	60
Aluminum Sign (5' x 4')	\$	350
Sure-Close Organic Bin (200 units)	\$	1,150
EcoCaddy Green 6-Gallon (210 units)	\$	2,720
3-Gallon Natur-Bags (40 cases)	\$	1,158
Recycling Guides (300)	\$	165
Vinyl Stickers for bins (1,000)	\$	323
 TOTAL TO LAUNCH PROGRAM	 \$	 6,075

Note: As kits are sold, monies are returned to the designated account to be used to purchase additional kit components and to fund hauling costs.

City Carting subcontracted the hauling services to a commercial food scrap hauler, Curbside Compost. Curbside charges a per service pickup charge of \$75 and a per toter (32-gallon) charge of \$4.50. In addition, City Carting charges a 10 percent administrative fee to manage and oversee the program.

EXPENSES (OPERATIONAL)

Oct-18	\$	302
Nov-18	\$	642
Dec-18	\$	488
Jan-19	\$	675
Feb-19	\$	523
Mar-19	\$	538
Apr-19	\$	523
 TOTAL	 \$	 3,691

The hauling and administrative fees from October 15, 2018 through April 2019 total \$3,691. During the warmer weather months (May – October), the per service pickup charge is expected to double to \$150, as pickups will increase to twice per week. Depending on how the program grows, the totor charge will also increase as the number of toters filled and emptied per week increases.

EXPENSES (ADDITIONAL)

Sure-Close Organic Bin (200 units) - Reorder	\$	1,150
Eco-Caddy Green 6-Gallon (200 units) - Reorder	\$	2,590
Recycling Guides (300) - Reorder	\$	185
Compost (20 cubic yards, delivered)	\$	774
TOTAL	\$	4,699

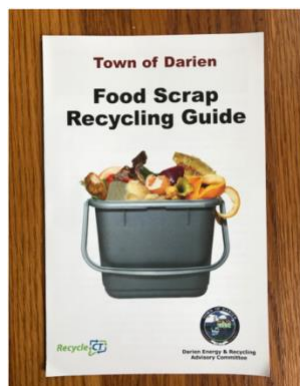
INCOME

Innovation Grant	\$	8,460
Sale of Residential Kits	\$	5,025
Sale of Compostable Bags	\$	682
TOTAL	\$	14,167

A comparison of expenses to income nets a current cost of \$500 paid by the Town of Darien. Income will again be generated through the continued sale of residential kits, but the program is ongoing and the hauling and administrative costs will continue as described above.



Various components of the kits were ordered in bulk



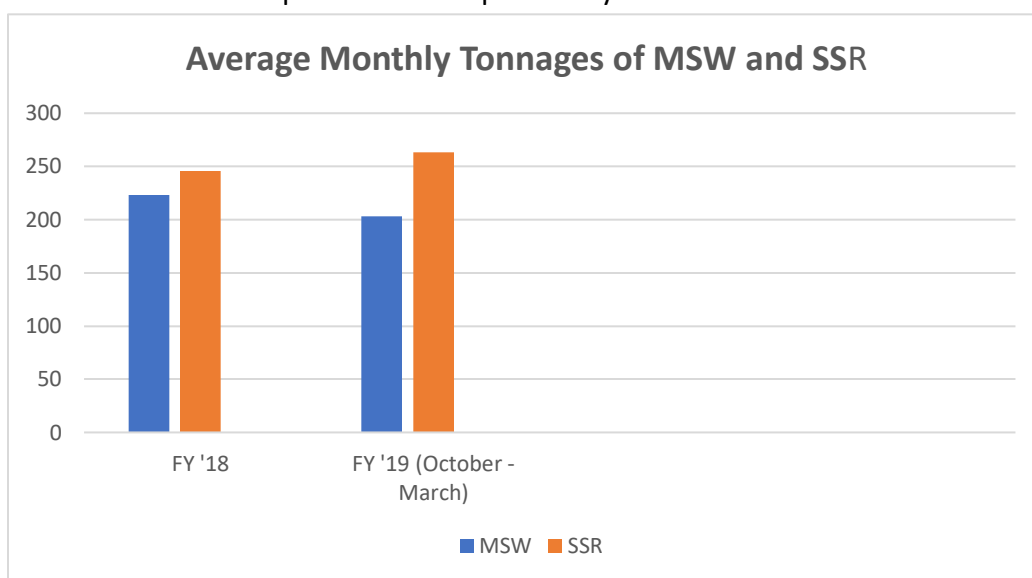
Everything residents need to know to divert food scraps from the waste stream



A complete residential starter kit

Conclusions:

- Each new recycling initiative established at the Darien Recycling Center has been met with support from residents, and the Food Scrap Recycling Program is no exception. Early adopters have demonstrated commitment to the program, as evidenced by a consistent diversion rate. With time and increased outreach we expect that rate to increase to our target of 1.5 to 2 tons per week. Many residents with private haulers are not interested in a drop-off program but have expressed interest if the service were offered by their haulers. Preliminary discussions are underway to determine the feasibility of allowing haulers to tip this organic material at our facility.
- Since the food scrap recycling program was launched six months ago, decreases in Municipal Solid Waste (MSW) and increases in Single Stream Recycling (SSR) tonnages have been noted compared with the previous year:



Though other variables could explain the trend, it is possible that as residents transitioned to source separating their food scraps, they also became more aware of and committed to recycling in general.

Tonnage of MSW decreased and SSR increased since the launch of the food scrap recycling program.

A correlation?



- The program has also inspired other towns to consider establishing their own food scrap recycling programs. Regular postings via social media have yielded inquiries from volunteers and/or town officials from Greenwich, Rowayton, Fairfield, Wilton, Haddam and Old Saybrook. In-depth discussions about Darien's program have ensued, with a follow-up visit to our site by representatives from Greenwich.



A contingent from Greenwich visited March 22nd

- As with many new municipal programs, a few minor problems were encountered during implementation (e.g. quality issues with the 6-gallon buckets, positioning of totes at the drop-off). These issues were resolved and the Food Scrap Recycling Program is quickly becoming woven into the fabric of our community. We have every confidence that the program will continue to grow and that Darien can continue to serve as a role model for others in our region and across the state.

Organic materials that are source-separated from the trash are highly recyclable and should be thought of as a resource, not a waste – CT DEEP

