



County of Fairfax, Virginia

MEMORANDUM

DATE: January 26, 2021
TO: Board of Supervisors
FROM: Bryan J. Hill
County Executive *B. Hill*
SUBJECT: Compost Pilot Program Update

The Solid Waste Management Program (SWMP) has prepared this report to supplement the Compost Pilot Program Update presentation (draft attached) that will be provided on February 2, 2021, to the Environmental Committee. The report, written in response to directives from the Board of Supervisors through the Green Initiatives #2, examines the resources, planning and options available to create a system to divert food waste from the waste stream. For our community to be successful in reducing our collective waste being generated, we are working towards a cultural change on how we generate and dispose of waste items. Reducing and composting food waste and other organic items like paper towels and napkins is another rung on the ladder to waste reduction.

Research

The process to expand food waste composting programs began with a review of the approaches taken by communities in the region and across the nation. The research shows that there are essentially three ways to provide the service: as a drop-off program at weekly events such as farmers markets; as a drop-off program at public and private facilities that are open daily; and as a curbside program with weekly collection. Locations must be carefully selected to ensure that they do not attract illegal dumping and that the food scraps are not contaminated. Factors such as cost, convenience, safety, demand for the service and economies of scale must all be considered as we develop this service for our residents.

The following discusses the various practical approaches available for providing food waste composting service to the public and highlights successful programs from neighboring jurisdictions and model programs from elsewhere around the United States.

Local Drop-off Programs

Many DMV communities use drop off sites to aggregate food waste for transport to a composting facility. Some notable local examples include the following:

- **Private-Sector Programs**

MOM's Organic Market – residents can drop off food waste at area MOM's stores. There are two stores in Fairfax County, open seven days a week.

- **Farmer's Markets**

Arlington County – food waste can be dropped off at the Columbia Pike Farmers Market on Sundays.

Greenbelt, MD – the City contracts with Compost Crew to provide the service.

Washington, DC – residents drop off food waste at designated farmers markets in all eight City Wards. The food waste collected is composted at DC community composting sites and at the Prince George's County Organics Compost facility. They do not accept dairy, meat, or any type of biodegradable or compostable plastics or packaging.

- **Municipal Drop-off Programs**

Arlington County – food waste is collected at the Earth Products Recycling Yard. Two carts are available to the public Monday-Saturday. The county uses an in-vessel composter to process the food waste.

College Park, MD – three drop-off locations are available 24/7. The City provides 5-gallon pails with a gamma seal lid.

City of Fairfax – food waste is collected at the Composting Center, near City Hall and next to the community garden. Carts are available 24/7 to accept food scraps. The City offers free certified-compostable plastic bags to residents.

City of Falls Church – the original program was based at the Falls Church Farmers Market, which operated on Saturday mornings. Due to demand for more frequent and convenient service, the City opened a drop-off location behind City Hall that is open 24/7. Residents can get a free “starter pack” – a kitchen caddy and pack of compostable liners.

City of Gaithersburg, MD – food waste is collected at the public works facility, which is open 24/7. Some HOAs have contracted directly with food waste collectors to set up their own drop-off locations.

City of Greenbelt, MD – food waste is collected at the Residential Recycling Center and also at farmers markets. The City currently provides countertop containers but that may change.

Local Curbside Collection Programs

- **Private Sector Programs**

Compost Crew, a registered food waste collector/composter, provides curbside collection to several hundred Fairfax County residences. While the firm does not serve the entire County, the service area is expanding (e.g., service to Reston began in October 2020). Veteran Compost also provides curbside service in Fairfax County. Recently, there are two new service providers, Apex Organix and Purple Pilot Program, that are offering collection services within Fairfax County.

- **Municipal Programs**

City of Falls Church – residents have the option for curbside collection (provided by contractor) which costs \$6 per month or \$66 per year. The subscription service is subsidized by the City (i.e., the resident and the City share the cost of the service), and there is a one-time fee of \$10 to cover the setup and a 5-gallon container with a compostable liner. The liner is replaced by the collector each time it is collected. The program reports about an 18% participation rate among City households. This program accepts dairy, meat, and bones.

City of Laurel, MD – food waste is collected from a pilot program of 500 homes. Participation is voluntary. The City provides countertop containers and carts, and accept dairy, meat, and bones.

Prince George's County, MD – currently provides curbside collection service to 200 residents and plans to extend the service to an additional 3,000 residences beginning in January 2021. The County provides a 32-gallon organics cart and a small kitchen pail, and the program accepts dairy, meat, and bones. It is germane to note that the County does not have drop-off sites.

Prince William County, VA – partnered with Freestate Farms to construct and operate a regional compost operation. The facility recently opened and through our intercounty agreement, we can take food scraps and yard waste to the facility for recycling.

Model Approaches

City of Athens, OH – collects food waste curbside from approximately 1,500 households for a fee of \$6.33 per month. Households are automatically enrolled and receive a five-gallon bucket and an instructional pamphlet. Residents have the option to *opt-out* of the service.

City of Austin, TX – provides food waste collection service to approximately three-quarters of its curbside customers. The City provides a 32-gallon cart for organics, but residents can opt out of the program and have the cart removed if they choose not to participate. The City uses a Pay-As-You-Throw (PAYT) business model, so residents pay more for larger trash carts.

City of Boise, ID – collects food waste along with yard waste. The program does not accept meat, bones, or dairy, and asks residents to limit pesticide use on the yard waste that goes into the cart. The City recommends that residents line their carts with cardboard or newspaper to keep material from sticking to the bottom. Boise leased land to Republic Services to build and operate a composting facility. Republic also provides collection services.

City and County of San Francisco, CA – collects food waste along with yard waste. Separate collection of food and yard wastes has been mandatory since 2009. All residents in the jurisdictions have access to the service, including multi-family buildings. The City has tried many different types and distribution systems for residential kitchen containers, including installing compostable bag dispensers for apartment residents (property managers are responsible for refilling the dispenser).

City of Scarsdale, NY – offers weekly curbside collection of food waste to all residents at no additional charge. Initially, residents received a starter kit with a collection container, compostable plastic bags, and a written guide to the program. The City also operates a drop-off site.

The City of Seattle, WA – residents are required to participate in separate food scrap and yard waste (commingled) collection service. Compostable paper bags are optional; biodegradable or plastic bags are prohibited. Food and yard waste are collected in one container, along with shredded paper and food-soiled paper.

Pilot Programs

In 2017, SWMP began offering food scrap/organics composting during Department of Public Works and Environmental Services (DPWES) annual employee picnics. Staff monitored the use of the containers to ensure that only food scraps were placed inside. Separating food scraps from other waste requires people to think before they throw. Having good signage is important, as is ongoing communication with those using the service. Prior to events, DPWES procured compostable service ware to increase the amount of material that could be recovered. Providing food scrap recovery at these events diverted as much as fifty percent of the waste generated. Beverage containers were recycled, which also reduced the amount of waste produced. Additionally, the SWMP provided food waste collection and composting service during the Springfest festival in 2017 and 2018.

In 2018, SWMP established a pilot program to register companies collecting food scraps for composting. The purpose of the program is to encourage the growth of local companies collecting food scraps in the region by relieving these typically small firms from some of the permitting and regulatory requirements faced by more traditional refuse and recycling collection companies. Two companies, Compost Crew and Veteran Compost have registered with the program, with the registration of two additional start-up companies pending.

The Fairfax County Employees for Environmental Excellence (FEEE) partnered with SWMP to provide composting at the 2019 *Live Well!* employee health expo and arranged for food scrap collection and composting at several county office buildings, including the Government Center, the Herrity and Pennino buildings, and the Department of Vehicle Services' operations division. This program is also currently being introduced at several Board of Supervisors' district offices.

SWMP launched a pilot program in November 2020, to offer residents a place to drop off food scraps for composting. The Food Scraps Composting Pilot Program, which is modeled after a successful program operating in the City of Falls Church since 2017, provides drop-off locations at the I-66 Transfer Station and the I-95 Landfill Complex. Because the sites are at staffed locations, there has not been any noticeable contamination or illegal dumping. One of the issues with unstaffed sites is the likelihood that they will become contaminated with non-food waste or used for illegal dumping.

Costs

Adding food scrap collection to the services offered by Fairfax County will benefit from some of the infrastructure already in place. Components of an organics composting program include:

- Contractual services for collection and composting of food scraps.
- Staffing – to provide assistance for people using the service, particularly early in the program, for record keeping and to prepare containers for collection.
- Site improvements for permanent drop-off locations.
- Containers – countertop pails, buckets.
- Outreach materials – signage, posters, brochures, advertising.
- Carts for curbside collection – estimated to cost more than \$2.5 million for Sanitary District customers.

There are two current contracts for food waste composting service. The first is for collection of food waste from County facilities and is managed by the FEEE. The contractor, Compost Crew, collects food waste from the loading docks at Herrity, Pennino and the Government Center weekly. FEEE purchased the containers that are placed in the offices and County staff bring the food waste to the food waste carts that are provided by the contractor. The contractor is responsible for the cleaning and maintenance of the containers.

The second contract is for the pilot drop-off program for residents. There are currently two drop-off locations, both at SWMP sites. The initial cost for collection and composting is approximately \$2,000 per month. SWMP provided food scraps buckets to residents during the initial rollout and outreach, but it is anticipated that most people would use their own containers to transport material from home to the drop-off site. The food waste drop-off carts are located in an enclosure built by SWMP and residents can drop off their food waste into the carts. The carts are maintained and collected by the contractor on a weekly basis. There was an initial cost to set up the fencing and site preparation of \$6,000.00 per location.

As part of the pilots the SWMP has developed new outreach materials, updated the website, and recorded an Enviropod about food waste and composting. Here is the link to the new website: <https://www.fairfaxcounty.gov/publicworks/recycling-trash/composting-organic-waste>.

Opportunities

The Joint Environmental Task Force (JET) recommends Fairfax County government and Fairfax County Public Schools (FCPS) set an aspirational goal to be at zero waste by 2030. By implementing the policies for reaching zero waste that are developed in response to the JET Initiative, Fairfax County will define best practices that can be adopted throughout the County. One of the recommendations was to conduct trash and recycling audits to obtain baseline data and repeat periodically to track progress. The U.S. Environmental Protection Agency has estimated that food scraps account for 30 percent of the waste generated. By conducting audits of the waste generated in different settings such as schools, offices, and residential settings, we will be better able to tailor solutions that will be most effective.

There is no way to reach zero waste without tackling food waste and other organics because they are such a big component. Strategies to divert food waste begin with implementing pilot programs, evaluating the data and developing solutions. As part of the JET Zero Waste Plan, both County and FCPS will work towards diverting food waste from the waste stream. In doing so we will gain institutional knowledge and experience on how to effectively manage food waste at a large scale. This will help inform and guide our efforts to expand diversion efforts countywide.

Recommendations for pilot programs include:

- Continue pilot program at I-66 Transfer Station and at the I-95 Landfill Complex.
- Expand pilot program to four farmers markets. Both the Fairfax County Park Authority (FCPA) markets and non-profit market organizers are eager to offer food waste composting at their markets.
- Develop a pilot program to provide curbside collection in Sanitary Districts. SWMP can test the program in one or more collection routes to gauge the costs and resources needed to provide the level of service residents prefer. A major component will be learning about participation rates.
- Co-locating food waste drop-off sites at Purple Can locations is not recommended at this time. These sites are not suitable for several reasons including space requirements, zoning limitations, public health, vector, and odor concerns.

Next Steps

Composting organic material such as food scraps and yard waste are part of an integrated waste management system. Some of the components of this system are already in place such as weekly curbside collection of yard waste. Others are still in the evaluation stage such as the food scrap collection pilot program. The data that is collected from these programs, and lessons

learned from the JET zero waste effort, will allow us to develop the services and outreach necessary to successfully divert food scraps from disposal toward a more sustainable result. The JET zero waste effort provides an opportunity to rethink the way we procure goods and services across county and FCPS operations as it relates to the waste we generate.

Attachment: Compost Pilot Program Update presentation

cc: Rachel Flynn, Deputy County Executive
Randy Bartlett, Director, Department of Public Works and Environmental Services (DPWES)
John W. Kellas, Deputy Director, DPWES, Solid Waste Management Program (SWMP)
Hans Christensen, Director, DPWES, SWMP, Solid Waste Operations Division
Eric Forbes, Director, DPWES, SWMP, Recycling, Engineering and Environmental Compliance Division

FAIRFAX COUNTY
VIRGINIA

Solid Waste

Compost Pilot Program Update

Eric Forbes, Director of Engineering & Environmental Compliance, SWMP

February 2021

Outline

- Current Program
- Research
- Pilot Programs
- Opportunities
- Next Steps

Compost Right!

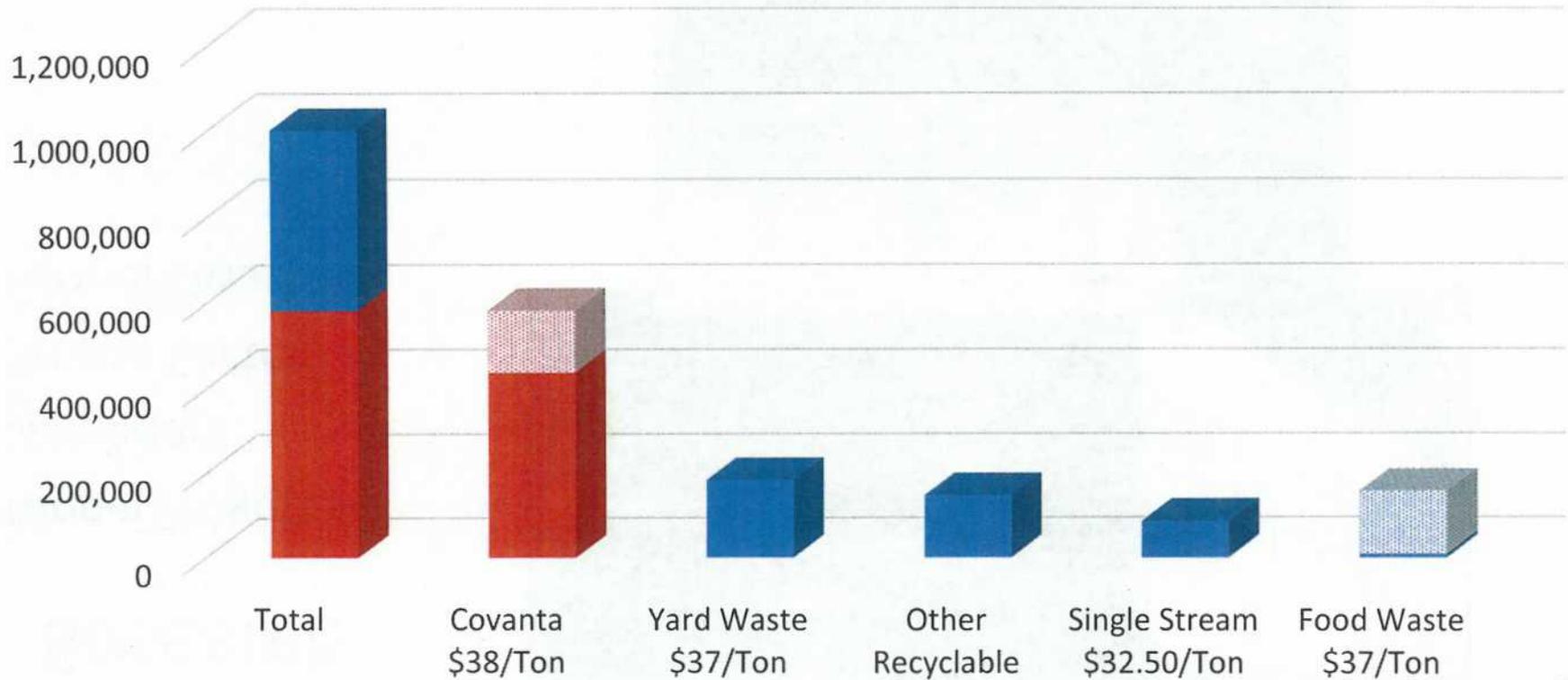
Place all the "COMPOST YES" items in your compost bin.
Follow the chart below to compost the right way!



A Fairfax County, VA Publication | November 2020
To request reasonable ADA accommodations, call the
Solid Waste Management Program at 703-324-5230, TTY 711.



2019 Waste & Recycling Tonnage



Solid Waste Management Program



Research

- Model Programs
- Neighbors
- Private Sector
- Farmers Markets



Solid Waste Management Program



Pilot Programs

- Compost Companies
- Food Scrap Drop Off Locations
- FEEE
- County Sponsored Events



Food Scraps Drop Off Pilot

- Two Locations
- 4500 lbs Collected
- Outreach
- Lessons
- Cost



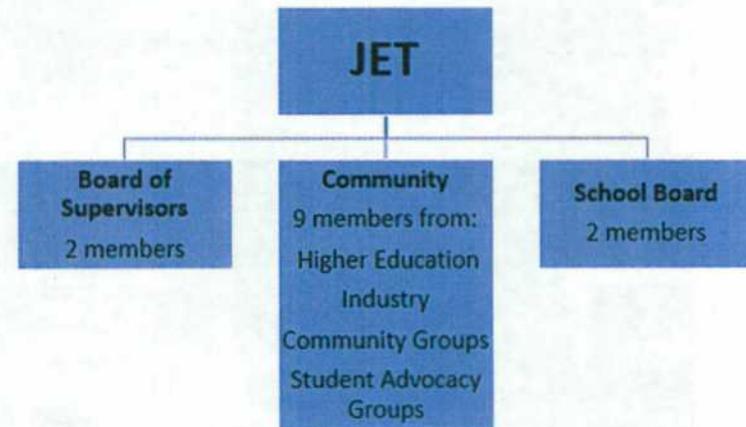
Opportunities

- JET Initiative
- Farmers Markets



JET Zero Waste

- 2030 Aspirational Goal
- County & FCPS Operations
- FCPS, DPMM, FMD, FCPA, & DPWES
- Plan to include:
 - Food Scraps/Organics Diversion



Farmers Markets

- Fairfax County Park Authority
 - Hosts 10 farmers markets
- FRESHFARM
 - Nonprofit that promotes sustainable agriculture and improves food access
- Central Farmer's Markets
 - Operates a year-round market in Vienna on Sundays



Next Steps

- Continue Pilot Programs
- JET Zero Waste Plan- Work with partners to pilot institutional programs
- Expand to Farmers Markets
- Evaluate Curbside Collection Pilot



For additional information please contact:

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<https://www.fairfaxcounty.gov/publicworks/recycling-trash>

