

Lines of Business

LOB #351:

LEAF COLLECTION

Purpose

Curbside vacuum leaf collection (CVLC) is a traditional public works service practiced in many communities in the United States. CVLC was included as another County service to accompany refuse collection service provided to residents residing in County Sanitary Districts.

The purpose of CVLC is to:

- Keep streets clear of leaves to decrease their ability to create road conditions that cause accidents and impede parking;
- Prevent the leaves from accumulating in storm drains to help reduce flooding potential and their discharge into surface waters of Fairfax County;
- Aid in keeping communities clean and to prevent vermin harborage; and,
- Prevent the need to use plastic bags for leaf collection which inhibits the ability of the leaves to be used to make compost used as a soil conditioner.

Description

The SWMP provides vacuum leaf collection service at the curb line for customers within designated sanitary leaf districts during the fall season of each year. Leaves are collected using vacuum leaf collection equipment that vacuums the unbagged leaves raked to the curb on three separate occasions during the leaf collection season (the period from October through mid-January).

In the fall months, crews with vacuum leaf collection equipment are deployed to the leaf districts and rake leaves from the curb that have been placed there by residents. Routes for leaf collection follow the established routes used for trash and recycling collection. Leaves collected are transported to either of two composting facilities that are not owned or operated by Fairfax County. The facilities include:

- The Prince William County yard waste composting facility owned by Prince William County and operated by a contractor under contract to the County.
- Loudoun Composting, a privately-owned composting facility in Loudoun County.

The leaf season begins in October of each year and limited term employees are hired to conduct the leaf collection process under the direction of SWMP staff. Crews move through the neighborhoods in an orderly fashion to remove leaves. Employees are thoroughly briefed on safety procedures to be used during leaf collection activities to prevent injuries and to ensure that the employees know how to use the vacuum leaf collection equipment. This service is conducted with 47/47.0 non-merit seasonal positions.

The leaf collection routes are scheduled prior to the implementation of the leaf collection practice. This is how the SWMP communicates with customers to let them know when leaf collection crews will be in the neighborhood. This communication provides sufficient lead time to allow the customers the opportunity to rake leaves to the curb so that when the leaf crews arrive, the leaves will be available for collection. Each customer is provided with three rounds of leaf collection in the fall to permit leaf fall to completely occur while providing time for the customer to rake leaves to the curb.

Solid Waste Management

Communication with leaf collection customers is paramount to the annual success of the program. All leaf collection customers receive an annual brochure each year with general information about how the program works. Customers are notified in advance using visible signs placed in numerous locations in the leaf collection district with dates as to when collection will occur in their neighborhood. The SWMP has also developed a listserv through the County's website where residents can sign up to receive automatic notification electronically as to when leaf collection will occur in their neighborhood.

Residents receiving CVLC are charged for this service from the County and this revenue is used to cover the cost of the provision of the service by the SWMP. Revenue is derived from a service fee that is charged to homeowners and businesses within the districts. The FY 2016 fee is \$0.015 per \$100 of assessed real estate value and this service fee has not been increased in five years.

Benefits

The benefits of the CVLC program are as follows:

- Leaf collection districts are typically in older neighborhoods where heavy forested areas with large quantities of leaves in the fall are in existence. This service is an aid to residents as they do not have to bag leaves in order to collect them;
- Prevents the introduction of leaves into surface waters reducing potential negative impacts to water quality in lakes and streams. This assists the County in achieving compliance with the recently issued Municipal Separate Storm Sewer System (MS4) permit;
- Prevents the accumulation of leaves in storm drains that can contribute to flooding in the County;
- Keeps communities clean and allows for orderly collection where collection of leaves in bags or other containers may not be practical or efficient. It also provides for general community cleanliness and prevents vermin harborage;
- Prevents the need for plastic bags for leaf collection and as such, greatly reduces plastic bags used to collect yard waste from ending up in compost made from leaves. Removing yard waste from plastic bags is difficult as the bags have a tendency to become entangled with the contents of the bag. It is very difficult, if not impossible, to remove bits of plastic bags from compost once the plastic has been introduced into the compost mix. Also, mechanical equipment to remove yard waste from plastic bags has not evolved to the point where the plastic is efficiently removed. Often, the removal of plastic bags is manual labor which adds to the cost of composting the material and can reduce the prices paid for compost with undesirable pieces of plastic; and,
- Aids the County in achieving its annual recycling rate as yard waste is required to be recycled according to Fairfax County Ordinance, Chapter 109.1.

Mandates

- **Fairfax County Ordinance, Chapter 109.1** - Fairfax County has had an established solid waste ordinance controlling the collection, recycling and disposal of solid waste for decades. The Fairfax County solid waste ordinance, Chapter 109.1, was amended in 1994 by the Board of Supervisors to require that residents separate yard waste from trash and other recyclables for placement at the curb separately. It must be placed separately at the curb because it is collected separately for delivery to either of two composting facilities identified earlier in this document. Delivery to the composting facility is conducted as the code requires yard waste to be recycled.
- **Code of Virginia § 15.2.-935** - The law provides local jurisdictions with the authority to prohibit the placement of leaves and grass in landfills.
- **9VAC-20-130-30** - Virginia Administrative Code states that jurisdictions must develop comprehensive and integrated Solid Waste Management plans that consider and address the Commonwealth's solid waste management hierarchy which prefers recycling to disposal (9VAC-20-130-40).

Solid Waste Management

- **Code of Virginia § 10.1-1411(D.1)** - Jurisdictions that meet certain seasonally-averaged population statistics must recycle at least 25 percent of all solid waste generated within their borders.

Trends and Challenges

Trends

- CVLC is anticipated to remain popular as it significantly reduces the amount of work that a resident needs to expend to remove leaves from the curb;
- Increases in customers receiving CVLC have been moderate over the past decade and moderate increases over the next decade are anticipated. Leaf collection services are only available to Sanitary District customers so increases will not exceed the number of Sanitary District customers; and,
- Plastic bags negatively impact the quality of compost made from leaves as undesirable pieces of plastic bags end up in the finished compost. CVLC eliminates the need to use plastic bags. Prince William County has indicated to Fairfax County that it intends to disallow the delivery of yard waste in plastic bags. When this occurs, Fairfax County will either no longer have the ability to use the facility or the County will prohibit the placement of yard waste in plastic bags for collection at the curb.

Challenges

- Staff work continuously to limit costs for services. Fluctuations in fuel prices and labor impact the cost of this service;
- The annual process to hire over 47 non-merit seasonal employees requires the significant efforts of many staff members whose regular work is redirected to accomplish this annual activity; and
- The new MS4 permit may significantly alter how yard waste is managed in Fairfax County. The SWMP works closely with Stormwater Management Program as compliance activities associated with the MS4 permit are implemented.

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
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FUNDING			
<u>Expenditures:</u>			
Operating Expenses	\$1,911,023	\$2,100,142	\$1,854,458
Total Expenditures	\$1,911,023	\$2,100,142	\$2,364,737
Total Revenue	\$2,141,693	\$2,258,491	\$2,312,567
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
<u>Positions:</u>			
Regular	0 / 0	0 / 0	0 / 0
Total Positions	0 / 0	0 / 0	0 / 0

Solid Waste Management

Metrics

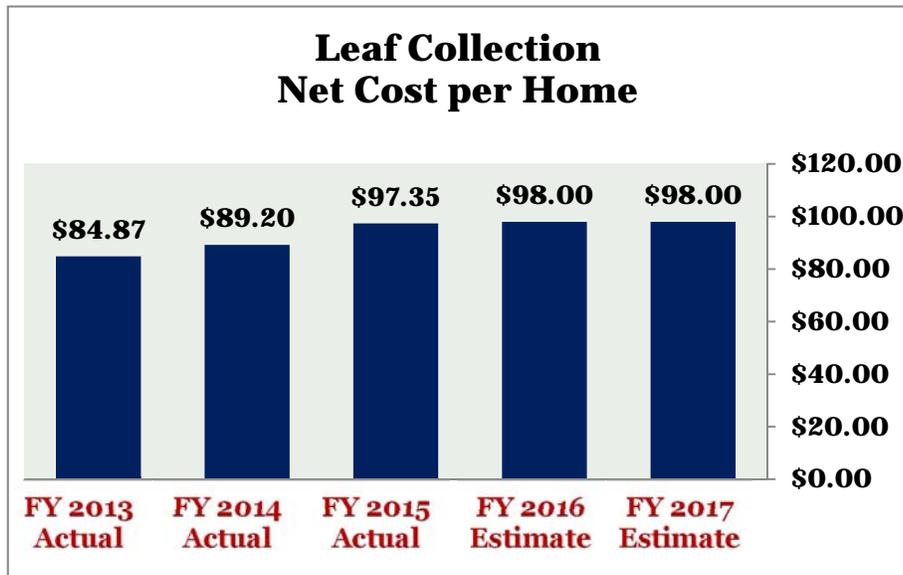
Metric Indicator	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	Actual	Actual	Actual	Estimate	Estimate
Tons of Leaves Collected	7,203	7,737	8,358	8,100	7,900
Net Cost per home for leaf collection	\$84.87	\$89.20	\$97.35	\$98.00	\$98.00
Percent of leaf customers rating service good or better	NA	95.00%	94.00%	95.00%	95.00%

Leaf Collection - Tonnage

Leaf production is driven by weather, rainfall and other environmental factors, and metrics on the quantity of leaves collected show that there is moderate annual variation in leaf production. The Solid Waste Management Program utilizes averages and factors in trends of the most recent years to forecast leaf tonnage.

Leaf Collection - Net Cost per Home

The cost of the leaf collection program has trended upward slightly in recent years due primarily to allocation of program costs. Many of the functions of the leaf collection program such as drivers, management and supervision, and administrative support are performed by staff based in other programs. Since FY 2014, the SWMP more accurately tracked and allocated costs associated with the leaf collection process.



Leaf Collection - Customer Satisfaction Survey Results

The customer satisfaction survey demonstrates a relatively high degree of satisfaction with the program's goal of a 95 percent satisfaction rate and County staff work to ensure that leaves from trees in the sanitary district are collected and removed from the sanitary districts.