Solid Waste Management Program

Mission

To protect the public interest through solid waste management planning and regulatory oversight of the County's refuse ordinances by providing efficient and effective collection, recycling, and disposal of solid waste for customers in an environmentally responsible manner.

Focus

The Solid Waste Management Program is responsible for the management and long-range planning for all refuse and recycling within the County. Operations include a County-owned and operated refuse transfer station, a privately owned and operated Energy/Resource Recovery Facility (E/RRF), two closed municipal solid waste landfills, a regional Ashfill operated by the County, two recycling and disposal facilities, eight drop-off sites for recyclable materials, and equipment and facilities for refuse collection, disposal, and recycling operations. The operation of the Solid Waste Management Program is achieved through the Division of Solid Waste Operations and the Division of Recycling, Engineering, and Environmental Compliance. The Administrative Services Branch performs the tasks associated with the overall administrative, technical and management functions for those funds that comprise Solid Waste Management.

Fund 40130, Leaf Collection, provides curbside vacuum leaf collection within Fairfax County's 38 approved leaf collection districts. For FY 2017, approximately 25,000 homes are included within these districts. Revenue for Fund 40130 is derived from a levy charged to homeowners within leaf collection districts. The FY 2017 leaf collection levy will remain as it has for several years at a rate of $0.015 per $100 of assessed real estate value.

Solid Waste Management Program

Fund 40140, Refuse Collection and Recycling Operations, provides for collection of waste and recycling from approximately 44,000 individual households within Fairfax County's approved sanitary districts. Revenue to support residential collection operations is derived from the refuse collection fee. In FY 2017, the annual collection fee of $345 for sanitary district residents will remain at the same level as it has for several years.

The fund supports collection of waste and recycling from properties owned and occupied by Fairfax County, known as the County Agency Routes (CARs) program. Revenue for this service is collected from County agencies to which the service is provided. The cost per cubic yard is based on fiscal year operating expenses.

The Recycling Program is also funded through Fund 40140; funding for the recycling programs is derived from Funds 40150 and 40160. The Recycling Program is responsible for:

- Overall management of solid waste reduction and recycling programs;
- Plans for future recycling programs and waste reduction systems; and
- Ensuring that disposal capacity remains available for wastes by reducing the amount of waste sent for disposal through recycling programs that divert reusable or recyclable items from the waste stream to avoid disposal.

As part of the County's recycling program, the Fairfax County SWMP operates six unmanned Recycling Drop-Off Centers (RDOCs) throughout the County and two manned locations, one at the I-66 Transfer Station and the other at the I-95 Landfill Complex. The RDOCs were established in the County to provide opportunities for residents and businesses to recycle before the curbside collection of recyclables was established in the County.

Fund 40150, Refuse Disposal, operates the I-66 Transfer Station which has responsibility for delivering refuse collected in northern and western portions of the County primarily to the Energy/Resource Recovery Facility (E/RRF) in Lorton, Virginia. In times when the E/RRF is unavailable due to maintenance or other operational issue, wastes are transported to the Prince William County landfill or other available landfills. Leaves and grass are transported to compost facilities for processing in Prince William and Loudoun Counties. Other programs conducted at the Transfer Station include: operation of the RDOCs for residents and small businesses, Household Hazardous Waste program, electronics recycling, used motor oil, antifreeze and cooking oil recycling, latex paint recycling, automotive battery recycling, and scrap metal/appliance recycling.

Fund 40160, Energy/Resource Recovery Facility (E/RRF), funds the contract with Covanta Fairfax, Inc. (CFI) for the operation of waste-to-energy facility which annually processes over 1 million tons of waste. This waste is used to generate approximately 80 megawatts of electricity. The County charges a per-ton disposal fee to all users of the E/RRF and subsequently pays the contractual disposal fee to CFI from these revenues. A long-term contract between the County and CFI ended on February 1, 2016, after an initial 25-year term. The new Waste Disposal Agreement (WDA) guarantees the County capacity to dispose of its waste through January 31, 2021, with two additional 5-year extensions available. This WDA covers the period of CFI's lease of the property to FY 2031. Moreover, the WDA affords the County stable pricing and sustainability for waste disposal. The County significantly reduced its risks and liabilities with the new agreement while maintaining performance guarantees and monitoring of the facility. The disposal rate of $29 per ton will remain the same through FY 2017.

Solid Waste Management Program

Fund 40170, I-95 Refuse Disposal, funds the operation of the I-95 Landfill Complex that has provided solid waste services to residents and businesses for over 25 years. This is the location of the municipal solid waste (MSW) landfill that was designed and constructed by the District of Columbia and operated from 1970 to 1995. This landfill accepted unprocessed (waste that is not combusted) and closed in December 1995. Since that time, the facility has accepted only ash generated by the combustion of waste. The ash landfill has been constructed in four phases and meets federal and state standards for the construction of new landfills which requires a double liner with a leachate collection system for the prevention of groundwater degradation.

Costs associated with maintenance and groundwater remediation related to the closed portion of the landfill are anticipated to increase in future years. This is attributed to landfill gas control, groundwater monitoring and remediation, stormwater management and leachate control. These activities ensure compliance with the facility's state-issued permit (SWP103) and applicable environmental regulations administered by the Virginia Department of Environmental Quality (VDEQ).

In FY 2017, the Refuse Disposal fee will increase to $26.50 per ton from the FY 2016 level of $24.50 per ton. It should be noted that the ash disposal rate at I-95 is anticipated to increase in future years to accommodate operational requirements and provide sufficient reserve funding for capital projects and post closure care. Offsetting some of these costs are the continued maintenance and expansion of landfill gas wells where methane is captured, processed and sold to generate electricity, provide fuel for heating other County facilities, and other environmental uses.

Specific description, discussion, and funding requirements for each fund of the SWMP can be found on the subsequent pages.

OPERATIONAL FEE STRUCTURE

Solid Waste Operations Fee Structure[1]

	Fund 40130, Leaf Collection	Fund 40140, Refuse Collection and Recycling Operations	Fund 40150, Refuse Disposal	Fund 40160, E/RRF	Fund 40170, I-95 Refuse Disposal
FY 2017 Fee	$0.015/$100 Assessed Property Value	$345 Curbside	$62/Ton, System Fee $58 Estimated (to be negotiated) Contract/Discount $62/Ton, Recycling and Disposal Center	$29/Ton	$26.50/Ton
FY 2016 Fee	$0.015/$100 Assessed Property Value	$345 Curbside	$62/Ton, System Fee $56 Negotiated Contract/Discount $62/Ton, Recycling and Disposal Center	$29/Ton	$24.50/Ton
Who Pays	Leaf District Residents	Sanitary District Residents	Private Collectors, Residents and County Agencies through Fund 40140	The County through Fund 40150	E/RRF, Fund 40150, and Participating Jurisdictions

[1] There are numerous special rates that have been negotiated and implemented as needed which are not reflected in the structure above. Examples include varying miscellaneous charges for yard debris (brush, grass, and leaves), tires, and others.

Key Performance Measures

Indicator	Prior Year Actuals FY 2013 Actual	FY 2014 Actual	FY 2015 Estimate/Actual	Current Estimate FY 2016	Future Estimate FY 2017
Output:					
Total tons of sanitary district refuse and recyclables	77,439	75,586	78,000/76,166	77,000	77,000
Total County tons recycled (1)	647,456	518,575	500,000/484,783	500,000	510,000
Tons of material delivered to the E/RRF	946,791	947,080	983,841/943,089	823,000	650,000
Efficiency:					
Cost per ton of refuse and recyclables collected in the sanitary districts	$325	$374	$342/$389	$342	$342
Disposal cost avoidance by recycling ($ in millions)	$34.30	$28.00	$27.00/$26.20	$27.00	$28.00
Cost per ton of material disposed (contract rate)	$53.00	$54.00	$54.00/$54.00	$56.00	$56.00
Service Quality:					
Percent of customers or citizens rating refuse services as good or better	97.70%	99.00%	95.00%/97.90%	95.00%	95.00%
Did the division meet the mandated recycling rate?	Yes	Yes	Yes/Yes	Yes	Yes
Tons delivered to E/RRF in excess of Guaranteed Annual Tonnage (GAT)	16,041	16,330	53,091/12,339	22,770	32,500
Outcome:					
Customer satisfaction deviation from 95 percent target	2.90%	4.90%	0.00%/2.90%	0.00%	0.00%
Total County recycling rate	51.00%	48.00%	45.00%/48.00%	50.00%	50.00%
Percent of GAT Met	101.72%	101.75%	105.70%/101.33%	102.85%	105.00%

(1) VA DEQ requires annual recycling rate to be prepared on a calendar year basis.

Performance Measurement Results

The performance measures for the Solid Waste Management Program were met and exceeded in FY 2015. The program exceeded the service quality measure of 95 percent of its customers rating refuse services good or better by almost 3 percentage points and exceeded the state-mandated recycling rate by 23 percentage points. In FY 2015, the number of tons delivered to the E/RRF exceeded the Guaranteed Annual Tonnage (GAT) by over 12,339 tons. Estimates of deliveries of waste to the E/RRF in FY 2016 and FY 2017 reflect the new contract with Covanta Fairfax, LLC which goes into effect halfway through the county's FY 2016 budget cycle. This is the reason that the amount of waste that will be delivered in FY 2016 is projected to be 823,000 tons, and the reason the FY 2017 projection (the first year the new contract will be fully in effect) is 650,000 tons. It should be noted that this 650,000-ton level reflects the projected annual GAT under the new contract for the next five years.