Solid Waste Management Program Overview

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 (SWMP) is responsible for the management and/or oversight and long-range planning for all refuse collection, recycling, and disposal operations within the County. Operations include a County-owned and operated refuse transfer station, two closed municipal solid waste landfills, a regional ashfill operated by the County, two recycling and disposal facilities, and equipment and facilities for refuse collection, disposal, and recycling operations.

Fund 40130, Leaf Collection, provides curbside vacuum leaf collection within Fairfax County's approved leaf collection districts. In FY 2021, 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 levy for leaf collection remains at \$0.012 per \$100 of assessed real estate value in FY 2021.

Fund 40140, Refuse Collection and Recycling Operations, provides for collection of waste and recycling from approximately 43,100 individual households within Fairfax County's approved sanitary districts. Revenue to support residential collection operations is derived from the refuse collection fee. In FY 2021, the annual collection rate is reduced by \$15 to \$370 per household, consistent with the recommendation from the County Executive included in the April 20, 2020 memorandum to the Board of Supervisors based on the inability to provide yard waste collection during the pandemic. 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 rate for CARs remains at \$5.50 per cubic yard per cubic yard in FY 2021.

The Recycling Program is also funded through Fund 40140 and Fund 40150, Refuse Disposal (described below), and it 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 two manned locations, one at the I-66 Transfer Station and the other at the I-95 Landfill Complex.

Fund 40150, Refuse Disposal, funds operations at the I-66 Transfer Station, which receives refuse collected in northern and western portions of the County, and transports the refuse to Covanta Fairfax, Inc. in Lorton, Virginia. When the Covanta facility is unavailable due to maintenance and other operational issues, wastes are transported to the Prince William County landfill or other available landfills outside of Fairfax County. 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 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.

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Fund 40170, I-95 Refuse Disposal, funds the operation of the I-95 Landfill Complex. This location includes the municipal solid waste (MSW) landfill that was designed and constructed by the District of Columbia and operated from 1970 to 1995 until it was 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 require a double liner with a leachate collection system for the prevention of groundwater degradation. These operations are funded by a Refuse Disposal fee which remains at \$26.50 per ton in FY 2021. Costs associated with operation and maintenance of environmental control equipment related to the closed portion of the landfill are anticipated to increase in future years. This is attributed to landfill gas collection, groundwater monitoring and remediation, stormwater management and leachate control. These activities ensure compliance with the facility's state-issued solid waste permit (SWP103) and stormwater permit (VAR051076), and applicable environmental regulations administered by the Virginia Department of Environmental Quality (VDEQ).

Specific descriptions, discussions, and funding requirements for each fund of the Solid Waste Funds can be found on the pages following the SWMP Overview.

OPERATIONAL FEE STRUCTURE

Solid Waste Operations Fee Structure¹

| | Fund 40130, Leaf Collection | Fund 40140, Refuse Collection and Recycling Operations | Fund 40150, Refuse Disposal | Fund 40170, I-95 Refuse Disposal |
|----------------|---------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------|
| FY 2021 Fee | \$0.012/\$100 Assessed Property Value | \$370 Curbside | \$68/Ton, System Fee \$64/Ton, Contract/Discount Rate, Recycling and Disposal Center | \$26.50/Ton |
| FY 2020 Fee | \$0.012/\$100 Assessed Property Value | \$385 Curbside | \$68/Ton, System Fee \$64/Ton, Contract/Discount Rate, Recycling and Disposal Center | \$26.50/Ton |
| Who Pays | Leaf District Residents | Sanitary District Residents | Private Collectors, Residents and County Agencies | 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

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Pandemic Response and Impact

For the Solid Waste Management Program, major challenges include employee safety precautions and efforts to maintain social distancing. Upon the onset of the COVID-19 pandemic, the SWMP procured additional cleaning supplies and personal protection equipment (PPE) for employees. Standard operating procedures (SOPs) were revised to include enhanced PPE practices. The SWMP is exploring options for deploying two staff members per truck instead of three per truck to enhance social distancing. The yard waste program was temporarily suspended due to staffing shortages; however, the collection rate has been reduced by \$15 in FY 2021 to account for this change. Additionally, the SWMP has limited the operating hours for citizens to drop off trash in an effort to limit in-person contact and promote public safety. The action plans by the SWMP will be continuously reevaluated and revised based on the evolving situation with the pandemic.

Performance Measurement Results

The Solid Waste Management Program recycling rate of 49.50 percent exceeded the state-mandated recycling rate of 25 percent by 24.5 percent, and 98.75 percent of customers rated refuse service as good or better. The actual number of tons delivered to the Covanta facility was lower than the FY 2019 projection due to the efforts to rebuild the Covanta facility as a result of the fire on February 2, 2017. The upgraded facility allows for Covanta to have a more efficient way to process waste from SWMP and produce more energy that can be sold to the local utility company.

| Indicator | FY 2017 Actual | FY 2018 Actual | FY 2019 Estimate/Actual | FY 2020 Estimate | FY 2021 Estimate |
|---------------------------------------------------------------------------|-------------------|-------------------|----------------------------|---------------------|---------------------|
| Output: | | | | | |
| Total tons of sanitary district refuse and recyclables | 71,320 | 71,391 | 75,000 / 74,273 | 71,300 | 72,832 |
| Total County tons recycled ¹ | 611,171 | 494,734 | 500,000 / 494,553 | 500,000 | 500,000 |
| Ton of material delivered to Covanta | 427,667 | 359,466 | 650,000 /615,894 | 650,000 | 650,000 |
| Efficiency: | | | | | |
| Collection Cost per home collected in the sanitary districts ² | \$420.13 | \$412.55 | N.A/\$429.56 | \$416.51 | \$435.51 |
| Cost per ton of material disposed (contract rate) ³ | \$58 | \$60 | \$62/\$62 | \$64 | \$64 |
| Service Quality: | | | | | |
| Percent of customers or citizens rating refuse services as good or better | 97.73% | 98.60% | 95.00% / 98.75% | 95.00% | 95.00% |
| Did the division meet the mandated recycling rate? | Yes | Yes | Yes / Yes | Yes | Yes |
| Outcome: | | | | | |
| Customer satisfaction deviation from 95 percent target | 2.73% | 3.60% | 0.00% / 3.75% | 0.00% | 0.00% |
| Total County recycling rate | 50.00% | 49.00% | 50.00% / 49.50% | 50.00% | 50.00% |

¹ VDEQ requires the annual recycling rate to be prepared on a calendar year basis. FY 2017 actuals were changed to reflect the correct total of County tons recycled.

A complete list of performance measures can be viewed at https://www.fairfaxcounty.gov/budget/fy-2021-adopted-performance-measures-pm

² Due to improvements in costing methodology, the previous cost rate actuals have been restated and the estimate for FY 2021 is increased to \$435.5 to more accurately reflect the total program costs to include all personnel, operating, capital equipment and capital project costs associated with the collection services provided to program participants. Previously, this measure reported operating expenses, with the following results: FY 2017 actual: \$384; FY 2018 Actual: \$378; FY 2019 Estimate/Actual: \$407/\$397.

³ The cost per ton reflects the cost charged to customers.