

# 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/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. 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, financial 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 2018, 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 levy of \$0.015 per \$100 of assessed real estate value will decrease to \$0.013 per \$100 of assessed real estate value in FY 2018. The division is able to reduce the rate based on the division's efforts to enhance the up-front planning strategies and streamline costs.

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 2018, the annual collection rate of \$345 will remain the same as the FY 2017 Adopted Budget Plan level.

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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 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, operates the I-66 Transfer Station, which has the 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 issues, 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 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. In FY 2018, the System Disposal Rate will increase from \$62 to \$64 per ton. The contractual disposal rate for FY 2018 will increase from \$58 to \$60 per ton.

As part of the FY 2018 Adopted Budget Plan, Fund 40160, Energy/Resource Recovery Facility, is being consolidated into Fund 40150, Refuse Disposal, as a result of a reorganization designed to generate efficiencies, maximize operational effectiveness and increase financial transparency. Fund 40160, as part of the Service Agreement, was originally created to manage the unique agreements between Fairfax County and Covanta Fairfax, Inc. These agreements included the County's obligations to maintain the debt service payments issued to fund the original construction of the refuse incineration facility operated by Covanta. The bonds and debt service payments have been retired for several years and the County entered into a new contract with Covanta that became effective on February 2, 2016. This contract is a fee-for-service agreement and is no longer associated with debt service obligations and commitments on the part of the County to contribute to operating and maintenance expenses and capital upgrades at the Covanta facility. Fairfax County's legal and financial requirements under the Service Agreement to Covanta Fairfax, Inc. have been met. Fund 40160 is no longer necessary to pay the contract expenses for waste disposal.

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 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

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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.

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 2018, the Refuse Disposal fee will remain at \$25.50 per ton which will provide adequate funding for operations and capital projects and maintain acceptable Post-Closure reserves. It should also be noted that the ash disposal rate at the I-95 Landfill Complex 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 and 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<sup>1</sup>

|                        | Fund 40130,<br>Leaf Collection              | Fund 40140,<br>Refuse Collection<br>and Recycling<br>Operations | Fund 40150,<br>Refuse Disposal   | Fund 40170, I-95<br>Refuse Disposal              |
|------------------------|---|---|--|--|
| <b>FY 2018<br/>Fee</b> | \$0.013/\$100<br>Assessed Property<br>Value | \$345 Curbside  | \$64/Ton, System Fee<br>\$60 Negotiated<br>Contract/Discount<br><br>\$64/Ton, Recycling and<br>Disposal Center | \$25.50/Ton                                      |
| <b>FY 2017<br/>Fee</b> | \$0.015/\$100<br>Assessed Property<br>Value | \$345 Curbside  | \$62/Ton, System Fee<br>\$58 Negotiated<br>Contract/Discount<br><br>\$62/Ton, Recycling and<br>Disposal Center | \$25.50/Ton                                      |
| <b>Who Pays</b>        | Leaf District<br>Residents                  | Sanitary District<br>Residents                                  | Private Collectors,<br>Residents and County<br>Agencies through Fund<br>40140                                  | Fund 40150 and<br>Participating<br>Jurisdictions |

<sup>1</sup> 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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## Key Performance Measures

| Indicator   | Prior Year Actuals |                |                         | Current Estimate | Future Estimate |
|---|--------------------|----------------|-------------------------|------------------|-----------------|
|   | FY 2014 Actual     | FY 2015 Actual | FY 2016 Estimate/Actual | FY 2017          | FY 2018         |
| <b>Output:</b>  |                    |                |                         |                  |                 |
| Total tons of sanitary district refuse and recyclables                              | 75,586             | 76,166         | 77,000 / 79,946         | 77,000           | 80,000          |
| Total County tons recycled <sup>(1)</sup>   | 518,575            | 484,783        | 500,000 / 520,628       | 510,000          | 520,000         |
| Ton of material delivered to the E/RRF  | 947,080            | 943,089        | 770,000 / 772,868       | 650,000          | 650,000         |
| <b>Efficiency:</b>  |                    |                |                         |                  |                 |
| Cost per ton of refuse and recyclables collected in the sanitary districts          | \$374.00           | \$389.00       | \$342.00 / \$343.99     | \$347.87         | \$346.91        |
| Disposal cost avoidance by recycling (\$ million)                                   | \$28.00            | \$26.20        | \$27.00 / \$29.20       | \$28.00          | \$29.00         |
| Cost per ton of material disposed (contract rate)                                   | \$54.00            | \$54.00        | \$56.00 / \$56.00       | \$58.00          | \$60.00         |
| <b>Service Quality:</b>   |                    |                |                         |                  |                 |
| Percent of customers or citizens rating refuse services as good or better           | 99.00%             | 97.90%         | 95.00% / 98.70%         | 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) <sup>(2)</sup> | 16,330             | 12,339         | 22,770 / 2,868          | 65,000           | 65,000          |
| <b>Outcome:</b>   |                    |                |                         |                  |                 |
| Customer satisfaction deviation from 95 percent target                              | 4.90%              | 2.90%          | 0.00% / 3.70%           | 0.00%            | 0.00%           |
| Total County recycling rate   | 48.00%             | 48.00%         | 45.00% / 50.00%         | 50.00%           | 50.00%          |
| Percent of GAT Met  | 101.75%            | 101.33%        | 100.00% / 100.37%       | 100.00%          | 100.00%         |

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

(2) The low actual number for FY 2016 is the result of numerous outages at the burn facility that caused SWMP to divert refuse to other disposal facilities. The increases in FY 2017 and FY 2018 are projected based upon the new agreement with Covanta, which went into effect in February 2016.

## Performance Measurement Results

The performance measures for the Solid Waste Management Program were met and exceeded in FY 2016. The program exceeded the service quality measure of 95 percent of its customers rating refuse services as good or better by almost 4 percentage points and exceeded the state-mandated recycling rate by 25 percentage points. In FY 2016, the number of tons delivered to the E/RRF exceeded the Guaranteed Annual Tonnage (GAT) by only 2,868 tons. The low actual number of tons delivered to the E/RRF in excess of GAT in FY 2016 is the result of numerous outages at the burn facility that caused SWMP to divert refuse to other disposal facilities. The deliveries of waste to the E/RRF in excess of GAT in FY 2017 and FY 2018 are projected to be equal to 65,000 tons and they reflect the new contract with Covanta, which went into effect in February 2016.