

Fund 40150: Refuse Disposal

Mission

The Fairfax County Solid Waste Management Program (SWMP) is dedicated to maintaining a healthy and safe environment through the prevention of pollution and other contamination associated with the improper disposal of refuse. This is achieved by providing environmentally sound and economically viable management of refuse and recyclables through the operation of the I-66 Transfer Station in Fairfax, Virginia, and environmentally sound and economically viable disposal of waste at the Covanta facility in Lorton, Virginia. This fund also supports public disposal programs at the I-95 Landfill. The I-66 Transfer Station provides the County with the following services:



- Wastes are delivered to Covanta in Lorton, Virginia, for final disposal either directly by refuse collectors or transported from the I-66 Transfer Station where original collection occurred.
- Brush is ground into mulch on site by County staff and equipment for reuse.
- Leaves and grass are transported to composting facilities in Prince William and Loudoun Counties where it is processed into a soil amendment. Construction and demolition debris (CDD) is transported to CDD landfills.
- Other programs conducted at the I-66 Transfer Station include: operation of the Recycling and Disposal Centers (RDCs) for residents and small businesses; Household Hazardous Waste; electronics recycling; used motor oil, antifreeze and cooking oil recycling; latex paint recycling; automotive battery recycling; and scrap metal/appliance recycling.
- Landfill gas generated at the closed landfill generates methane captured and processed for power production.
- Staff and equipment from the I-66 Transfer Station respond to emergencies by providing debris removal during emergencies and disasters, including snow and ice control in winter months.

The combustion of waste for power production at the Covanta facility in Lorton:

- Generates 80 megawatts (MW) of renewable energy.
- Reduces the need for landfill space through volume reduction of solid waste that occurs in the combustion process.
- Reduces greenhouse gas emissions by generating renewable energy.
- Recovers ferrous and non-ferrous metal from the ash, which is recycled.
- Uses treated wastewater (rather than potable water) for cooling water used during the combustion process.

Focus

Fund 40150, Refuse Disposal, funds the operation of waste and recycling services to the community by providing a location for waste collection vehicles to empty their loads so they can be transported to Covanta for final disposal. The main role of the I-66 Transfer Station is to move waste collected in the northern and western parts of County to the Covanta Fairfax, Inc. Waste to Energy Facility in Lorton or landfills outside the County for final disposal. The SWMP also uses County vehicles and private trucking companies to transport waste from the I-66 Transfer Station to its final disposal destination. The consolidation of loads of waste from small trucks into large trucks reduces the number of vehicles on the roads and operating costs for the County's solid waste management system as a whole.

In FY 2021, the System Disposal Rate remains at \$68 per ton and the Contractual Disposal Rate remains at \$64 per ton. Based on the projected slight decrease in tonnage, the total FY 2021 revenue for this fund is projected to be \$55,836,738, a decrease of \$55,124 from the FY 2020 Adopted Budget Plan total of \$55,891,862.

Fund 40150 pays a disposal fee per ton for all wastes disposed at the Covanta Waste to Energy Facility in Lorton. The SWMP recoups these costs through a disposal (tipping) fee to all users of the Covanta facility and those who deposit wastes at the transfer station.

The current contract between the County and Covanta guarantees the County sufficient capacity to dispose of its waste through January 31, 2021 with two additional 5-year extensions available. The contract covers the period of Covanta's lease of the property to FY 2031. Operational risks for the facility are retained by Covanta. Moreover, the contract affords the County below market pricing and sustainability for waste disposal. Fairfax County is contractually obligated to deliver approximately 650,000 tons of municipal solid waste to Covanta annually.

Recycling operations is responsible for providing the overall management of solid waste reduction and recycling programs that are required by the County and for developing plans for future recycling programs and waste reduction systems. The annual recycling rate in Fairfax, based on Calendar Year 2019 information, is 49.5 percent, well above the Commonwealth of Virginia's mandated rate of 25 percent. The agency's goal is to maintain a high rate of recycling in the County.

Performance measures for Solid Waste are displayed at a program-wide level. Please refer to the Solid Waste Management Program Overview in Volume 2 of the FY 2021 Adopted Budget Plan for those items.

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 this 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 the 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.

Organizational Chart



Budget and Staff Resources

Category	FY 2019 Actual	FY 2020 Adopted	FY 2020 Revised	FY 2021 Advertised	FY 2021 Adopted
FUNDING					
Expenditures:					
Personnel Services	\$12,617,995	\$14,328,468	\$13,982,831	\$14,703,548	\$14,229,735
Operating Expenses	34,655,093	38,925,495	40,409,414	38,925,495	38,925,495
Capital Equipment	1,446,594	2,795,000	3,077,342	1,720,000	1,720,000
Capital Projects	1,384,685	0	4,868,455	1,750,000	1,750,000
Subtotal	\$50,104,367	\$56,048,963	\$62,338,042	\$57,099,043	\$56,625,230
Less:					
Recovered Costs	(\$97,505)	(\$97,505)	(\$97,505)	(\$97,505)	(\$97,505)
Total Expenditures	\$50,006,862	\$55,951,458	\$62,240,537	\$57,001,538	\$56,527,725
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)					
Regular	155 / 155	155 / 155	155 / 155	155 / 155	155 / 155

FY 2021 Funding Adjustments

The following funding adjustments from the FY 2020 Adopted Budget Plan are necessary to support the FY 2021 program. Included are all adjustments recommended by the County Executive that were approved by the Board of Supervisors, as well as any additional Board of Supervisors' actions, as approved in the adoption of the Budget on May 12, 2020.

Other Post-Employment Benefits (\$98,733)
 A decrease of \$98,733 in Personnel Services reflects required adjustments associated with providing Other Post-Employment Benefits (OPEBs) to retirees, including the Retiree Health Benefits Subsidy. For more information on Other Post-Employment Benefits, please refer to Fund 73030, OPEB Trust, in Volume 2 of the FY 2021 Adopted Budget Plan.

Capital Equipment (\$1,075,000)
 Funding of \$1,720,000 in Capital Equipment reflects a decrease of \$1,075,000 from the FY 2020 Adopted Budget Plan. Of this amount, \$450,000 is for the replacement of one wheel loader, \$435,000 is for the replacement of three tractors, \$360,000 is for the replacement of three trailers, \$325,000 is for the replacement of one stationary crane, \$80,000 is to replace one broom tractor,

and \$70,000 is for the replacement of one mulch hopper. These items have exceeded their useful life and are required to be replaced based on the overall age and condition of the equipment.

Capital Projects **\$1,750,000**
 Funding of \$1,750,000 in Capital Projects is included to support civil work and major site fixes at the I-66 Transfer Station, including the replacement of an aging and failing scale system as well as the recovery of methane gas.

Changes to FY 2020 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2020 Revised Budget Plan since passage of the FY 2020 Adopted Budget Plan. Included are all adjustments made as part of the FY 2019 Carryover Review, FY 2020 Third Quarter Review, and all other approved changes through April 30, 2020.

Carryover Adjustments **\$4,989,079**
 As part of the *FY 2019 Carryover Review*, the Board of Supervisors approved funding of \$4,989,079, including \$1,420,624 in encumbered funding, \$2,818,455 in unexpended Capital Project balances, and an appropriation of \$750,000 from fund balance to replace an aging and failing scale system and to comply with I-66 environmental compliance requirements.

Third Quarter Adjustments **\$1,300,000**
 As part of the *FY 2020 Third Quarter Review*, the Board of Supervisors approved funding of \$1,300,000 to fund higher than anticipated costs associated with Capital Projects.

Position Detail

The FY 2021 Adopted Budget Plan includes the following positions:

REFUSE DISPOSAL – 155 Positions			
1	Division Director	5	Assistant Refuse Superintendents
2	PW Environmental Services Managers	1	Trades Supervisor
3	PW Environmental Services Specialists	3	Heavy Equipment Supervisors
1	Management Analyst IV	1	Maintenance Supervisor
4	Management Analysts II	8	Lead Refuse Operators
2	Financial Specialists III	54	Heavy Equipment Operators
1	Financial Specialist II	1	Motor Equipment Operator
2	Financial Specialists I	1	Equipment Repairer
1	Senior Environmental Specialist	1	Welder II
5	Environmental Technicians II	1	Welder I
1	Engineer III	1	Human Resources Generalist I
3	Engineering Technicians II	1	Administrative Assistant V
1	Engineering Technician I	6	Administrative Assistants IV
1	Network/Telecom. Analyst II	16	Administrative Assistants III
1	Safety Analyst	1	Administrative Assistant II
1	Code Specialist II	5	Senior Maintenance Workers
3	Code Specialists I	1	Maintenance Trade Helper II
1	Industrial Electrician II	14	Maintenance Workers

A Fund Statement and a Summary of Capital Projects are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., a contingency or planning project).

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FUND STATEMENT

Category	FY 2019 Actual	FY 2020 Adopted Budget Plan	FY 2020 Revised Budget Plan	FY 2021 Advertised Budget Plan	FY 2021 Adopted Budget Plan
Beginning Balance	\$72,926,504	\$64,695,126	\$73,874,451	\$68,199,776	\$66,899,776
Revenue:					
Interest on Investments	\$992,534	\$600,000	\$600,000	\$600,000	\$600,000
Refuse Disposal Revenue	49,163,776	54,116,542	54,116,542	54,101,318	54,101,318
Other Revenue:					
White Goods	\$1,021,977	\$700,000	\$700,000	\$650,000	\$650,000
Sale of Equipment	0	93,000	93,000	153,100	153,100
Licensing Fees	99,703	82,320	82,320	82,320	82,320
Miscellaneous	302,819	300,000	300,000	250,000	250,000
Subtotal	\$1,424,499	\$1,175,320	\$1,175,320	\$1,135,420	\$1,135,420
Total Revenue	\$51,580,809	\$55,891,862	\$55,891,862	\$55,836,738	\$55,836,738
Total Available	\$124,507,313	\$120,586,988	\$129,766,313	\$124,036,514	\$122,736,514
Expenditures:					
Personnel Services	\$12,617,995	\$14,328,468	\$13,982,831	\$14,703,548	\$14,229,735
Operating Expenses	34,655,093	38,925,495	40,409,414	38,925,495	38,925,495
Recovered Costs	(97,505)	(97,505)	(97,505)	(97,505)	(97,505)
Capital Equipment	1,446,594	2,795,000	3,077,342	1,720,000	1,720,000
Capital Projects	1,384,685	0	4,868,455	1,750,000	1,750,000
Total Expenditures	\$50,006,862	\$55,951,458	\$62,240,537	\$57,001,538	\$56,527,725
Transfers Out:					
General Fund (10001) ¹	\$626,000	\$626,000	\$626,000	\$626,000	\$626,000
Total Transfers Out	\$626,000	\$626,000	\$626,000	\$626,000	\$626,000
Total Disbursements	\$50,632,862	\$56,577,458	\$62,866,537	\$57,627,538	\$57,153,725
Ending Balance²	\$73,874,451	\$64,009,530	\$66,899,776	\$66,408,976	\$65,582,789
Reserves:					
Operating Reserve ³	\$7,086,305	\$5,653,550	\$5,641,881	\$6,640,898	\$6,558,279
Capital Equipment Reserve ⁴	10,436,562	929,396	5,131,311	9,961,346	9,837,419
Rate Stabilization Reserve ⁵	45,351,584	46,426,584	46,426,584	34,494,014	34,103,050
Environmental Reserve ⁶	1,000,000	1,000,000	1,000,000	5,312,718	5,246,623
Construction and Infrastructure Reserve ⁷	10,000,000	10,000,000	8,700,000	10,000,000	9,837,418
Unreserved Balance	\$0	\$0	\$0	\$0	\$0
System Disposal Rate/Ton	\$66	\$68	\$68	\$68	\$68
Discounted Disposal Rate/Ton⁸	\$62	\$64	\$64	\$64	\$64

¹ Funding of \$626,000 is transferred to the General Fund to partially offset central support services supported by the General Fund, which benefits Fund 40150. These indirect costs include support services such as Human Resources, Purchasing, Budgeting and other administrative services.

² Ending Balance fluctuations are a result of operating and revenue requirements that change annually. Funding is carried forward each fiscal year to provide flexibility given the uncertainty of market conditions, tipping fee negotiations, and expenditure requirements.

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³ The Operating Reserve provides funds to react to unanticipated events such as significant changes in waste quantities, increases in contract disposal rates at composting facilities and landfills, increases in fuel costs, significant reductions in revenues, etc. The reserve also acts as a rate stabilization reserve, allowing smooth transition to rate changes minimizing the impact on customers.

⁴ The Capital Equipment Reserve provides for the timely replacement of equipment required to operate the I-66 Transfer Station. Proceeds from the sale of equipment as well as a small portion of Refuse Disposal Revenue are used to fund this reserve. The amount fluctuates based on anticipated replacement schedules of the existing fleet of vehicles.

⁵ The Rate Stabilization Reserve is maintained in order to safeguard against significant increases in tipping fees charged to users of the Fairfax County Solid Waste Management Program.

⁶ The Environmental Reserve is a contingency fund, assuring that the County has funds to implement unplanned actions to protect the environment or meet regulatory requirements related to the closed landfill at the I-66 Complex. Specific examples of current and future environmental projects are likely to include landfill gas control, groundwater protective measures, stormwater, and wastewater management.

⁷ The Construction and Infrastructure Reserve provides for future improvements at the I-66 Transfer Station.

⁸ In August 1998 (FY 1999), Fairfax County implemented a contractual rate discount that was offered to any hauler that guaranteed all of its collected refuse or a specified tonnage amount would be delivered to the Energy/Resource Recovery Facility (E/RRF) or other County disposal sites. The FY 2021 Contract Disposal rate is \$64 per ton in order to meet program requirements, maintain identified reserves and avoid significant increases in rates in the future.

SUMMARY OF CAPITAL PROJECTS

Project	Total Project Estimate	FY 2019 Actual Expenditures	FY 2020 Revised Budget	FY 2021 Advertised Budget Plan	FY 2021 Adopted Budget Plan
I-66 Administrative Building Renovation (SW-000011)	\$2,902,638	\$1,143,304.30	\$1,303,841.70	\$0	\$0
I-66 Basement Drainage Renovation (SW-000023)	650,000	32,891.03	617,108.97	0	0
I-66 Environmental Compliance (SW-000013)	1,250,669	6,752.98	995,617.39	0	0
I-66 Landfill Methane Gas Recovery (SW-000029)	1,000,000	0.00	0.00	1,000,000	1,000,000
I-66 Transport Study/Site Redevelopment (SW-000024)	2,903,623	201,736.95	1,951,886.44	750,000	750,000
Total	\$8,706,930	\$1,384,685.26	\$4,868,454.50	\$1,750,000	\$1,750,000