

FINAL MINUTES
PRINCE WILLIAM COUNTY
SOLID WASTE ADVISORY GROUP (SWAG) MEETING
October 21, 2021

OPENING

Mr. Scott MacDonald called the meeting of the Solid Waste Advisory Group to order at 4:00 p.m. via Microsoft Teams.

ATTENDANCE

SWAG Members:

Present: Mr. Richard Arvin, Mr. Joseph Chisholm, Mr. Harry Glasgow, Mr. Ned Greene, Mr. Will Lintner, Ms. Keisha Strand, Mr. David Watjen, and Ms. Jane Wyman

Absent: Mr. Mark Bonner, Ms. Tiziana Bottino, Ms. Virginia Douglas, and Mr. James Gestrich

Solid Waste Staff: Ms. Monica Gorman, Mr. Scott Kleinfeld, Mr. Scott MacDonald, and Ms. Iobel Seyoum

Guests: Mr. Fouad Arbid, and Ms. Stacey Demers

AGENDA TOPICS

INTRODUCTIONS

Mr. MacDonald welcomed everyone to the meeting via Microsoft Teams and confirmed which members were in attendance. No visitors were present. However, two invited guests, Mr. Fouad Arbid and Ms. Stacey Demers, were present.

APPROVAL OF THE MINUTES

A quorum was present, so the draft minutes of the July 15, 2021 and September 16, 2021 SWAG meetings were approved as presented.

OPERATIONAL UPDATES

Landfill Operations

Mr. Kleinfeld reported that in September, the landfill took in 31,400 tons of refuse and collected 193 tons of co-mingled recyclables. Currently, the most significant issue facing the landfill is the number of tires we are receiving. A tire recycling facility has closed in North Carolina and will not reopen.

Without this tire recycler, the whole of Northern Virginia is facing a tire disposal issue. Mr. Kleinfeld stated that he has stopped all tires from coming into the landfill from large contractors and companies. Only residents may bring tires at this time. Mr. Kleinfeld decided to stop accepting commercial tires because we were exceeding our permit limits for tire storage on site. Mr. Kleinfeld plans to accept commercial tires again in the future.

Mr. Lintner asked where contractors and commercial companies are disposing of tires. Mr. Lintner and Mr. Arvin both stressed that they do not want to see illegal dumping of tires in neighborhoods or along the roadways. Mr. MacDonald indicated this is a regional issue, and he has brought it to the attention of the Northern Virginia Waste Management Board. Ms. Gorman stated that Mr. Kleinfeld took the action he did because the landfill was receiving semi-tractor trailer loads of tires, which caused us to exceed our permitted limit. In addition, the vendor that processes these tires did not have the capacity to take those tires at that time. This issue has resolved itself to some degree, and we will need to evaluate some of the policy issues moving forward.

Mr. Kleinfeld also informed the committee that co-mingled recyclables at the landfill are collected in a compactor unit. Residents must take the recyclable material out of plastic bags to place it into the packer unit. A packer unit can hold the equivalent of four blue containers. This change saves fuel, vehicles, and reduces our carbon footprint. New signage is on order. We are working with a vendor to get the compactors painted blue. Overall, this has been a success.

Balls Ford Road Operations

Mr. Kleinfeld informed the committee that in September, Balls Ford Road received 900 tons of yard waste. The landfill received 2,000 tons of material for composting. Arlington and Fairfax counties have delivered about 500 tons of material as well.

Recycling Programs

Mr. MacDonald stated that the office is receiving fewer yard waste program implementation questions. Questions are now predominantly about missed yard waste collection. He also informed the committee of a shredding event on Saturday, October 23, 2021, between 8 a.m. and noon at Pfitzner Stadium in Woodbridge.

PROJECT UPDATES

Review of Landfill Phase IV Conceptual Design Options

Ms. Gorman introduced Mr. Fouad Arbid to the committee. Ms. Gorman explained that Mr. Arbid has joined the committee again to answer any questions regarding the landfill Phase IV conceptual design. Ms. Gorman stated that the County is obligated to provide long-term disposal options for refuse. The County provides this through the landfill operations. Currently, our permitted capacity is about 10 to 12 years. Because of this short time frame, we are looking at design and construction of Phase IV, which will take about 8 to 10 years to complete. Unfortunately, practicable alternatives to landfilling are not currently available. The County has looked at new and emerging technologies, but these technologies are currently not reliable for large volumes of mixed waste. Other options would

include transferring waste to different jurisdictions. Mr. Arbid has not identified any long-term capacity in the state where we could transport our waste. There are also no other available properties in the County that can be used for landfilling. We must maximize the life of the landfill at its current location. Ms. Gorman explained that Mr. Arbid detailed these design options in September and shared three scenario comparisons. Scenario 1 has the most negligible impact on the stream and wetlands. This scenario will only impact about six acres of wetlands and has an estimated 22 years of life. Scenario 2 offers approximately 50 years of landfill life. This option does leave the stream, but it would require conversion into an engineered channel. Scenario 3 has lower construction costs, greater estimated landfill life, and would reroute the stream and recreate some wetlands. Scenario 3 would maximize the use and benefit of the property. Powell's Run will be realigned in this scenario, and wetlands and floodplain would be reconstructed to the west and north. A previous stream realignment occurred between Phase II and Phase III. This scenario offers about 80 years of capacity, allowing some time for new technologies to develop and for future generations to determine whether they want to fill the landfill to capacity.

Mr. Arvin asked how scenarios 2 and 3 impact Powell's Creek watershed. Are you increasing the flow of water to the lower part of the watershed, only to shift additional water that could cause floods? There is a lake right in the middle of Powell's Creek watershed. Have you looked at the impact of rerouting the stream or making the stream flow faster through the landfill? Mr. Arbid answered that regulations would not allow an increase to the water flow and/or the speed. When designing this realignment and improvements, they will plan for enough storage within the landfill property. The exit of Powell's Run would not exceed the current scenario. Whatever design alignment or channel put in would have to account for additional flows coming from upstream and mitigate those flows not to inundate areas downstream, which is required by regulation.

Mr. Arbid stressed that in Scenario 3, Powell's Run would be relocated and realigned to the north of Phase IV within the disturbed buffer. The undisturbed buffer is still 500 ft beyond the proposed new location of Powell's Run. Mr. Arvin stated that it is not a very big watershed. He asked for clarification—Mr. Arbid and engineers would be digging a trench equally as deep as the current creek to the north side of the creek, which would not be outside the watershed. How can you line an area and not increase the water flow, as it is not going to be absorbed into the ground? Mr. Arbid explained that the existing floodplain and Powell's Run are in the middle of the site. In Scenario 3, Powell's Run would be relocated as a meandering channel running along the north side of the landfill and would come back to the current location of Powell's Run before it exits the landfill. There will be significant excavation; however, the groundwater is quite a bit lower in this area. There will be a total of 8 million cubic yards of cut. All the soil that will be cut will be used for landfilling. Since we are attenuating a lot of the stormwater we are currently generating, our plan is to put a significant number of basins in this area as well. Mr. Arvin asked what would happen with the current stream bed. Mr. Arbid stated the groundwater would flow freely underneath the liner. The only change will be to the surface flow of the water. Mr. Greene asked if the cost of this scenario was included in the estimate presented to the committee earlier. Mr. Arbid answered yes. Ms. Gorman suggested that Mr. Arvin schedule a private conversation with Mr. Arbid if he would like to discuss

these issues in greater detail. Mr. Arvin agreed to email Ms. Gorman or Mr. MacDonald to set up a meeting date and time. *(Presentation slides are attached to this document.)*

Solid Waste Management Plan – Review of Section 9.0

Mr. MacDonald introduced Ms. Demers with SCS Engineers to discuss the Solid Waste Management Plan (SWMP). This discussion will cover Chapter 9, “Waste Management Initiatives.” Ms. Demers informed the group that the SWMP is currently in review by solid waste staff but should be ready for SWAG member review in December. We want the group to review these initiatives and the eight goals of the SWMP to see if they still seem appropriate. These eight goals include future use of the landfill, municipal solid waste collection services, recycling, source reduction and reuse, construction and demolition debris, special wastes, funding, and cooperation with adjacent jurisdictions.

Ms. Demers stated that when looking at the future use of the landfill, we would like the landfill to serve the County for as long as possible. Examples for future use can include an eco-park, special handling of materials like household hazardous wastes, nature trails on site, and possibly a donation center.

Moving to the next goal of collection services, the group previously agreed to recommend the elimination of the Saturday collection sites in one to five years to utilize the funds elsewhere to help improve collection programs for residents. These funds may be used by building more convenience centers, expanding what is offered at these sites, or adding trailer sites for glass collection. There is also a recommendation to consider options for the management of refuse collection in the Yorkshire district.

Ms. Demers then turned the group’s attention to the recycling goals, which include the promotion of food scrap recovery with the commercial sector, expanding residential organic materials management programs to include food scraps, expanding the number of glass recycling drop-off locations, and identifying areas of the County with low participation and/or high contamination rates for targeted outreach and education. The County is developing composting with the Phase I expansion of the Balls Ford Road Compost Facility. This expansion will also ensure that food waste can be composted. Glass recycling is also on the rise.

Ms. Demers then discussed source reduction and reuse. Although the donation center at the landfill is still closed, solid waste staff are hoping to eventually find a suitable partner to re-open the Donation Center. In the meantime, County staff is encouraging residents to take items to other donation centers in the County. Staff also plans to do more to public education about the issue of food waste and opportunities for food waste reduction.

As for construction and demolition debris (CDD), the County landfill currently accepts small amounts from residents and contractors. The landfill does not accept large amounts of CDD. Several private facilities that take larger amounts of CDD have closed. To encourage residents and businesses in the County to recycle CDD, it may be possible for the landfill to allow separated loads, such as clean

untreated wood, that could go directly to Balls Ford Road for composting. The County also promotes local CDD facilities to contractors and encourages deconstruction and salvaging of materials before demolition. Separated materials such as concrete and asphalt may be able to be used at the landfill. Mr. Arvin asked if construction and demolition debris facilities are regulated. Ms. Demers answered that private facilities are regulated and will not take materials that they are not permitted to take or do not have the space for. The County could also consider accepting segregated loads of wood at the Balls Ford Compost Facility and to work with the private sector on long-term solutions for soil management in the region.

Ms. Demers indicated the SWMP encourages the recycling of white goods, motor oil, antifreeze, and other special wastes. There are not too many new initiatives needed for this goal. She states that it is best to continue doing things as we currently are.

Turning to the solid waste fee, Ms. Demers reminded the group that currently the fee is \$70 per year for a single-family home. This fee has not increased since 1999. The fee will need to be increased to continue funding current operations and the Phase IV expansion. There is also the possibility to do a hybrid fee; where the fee is increased, as well as paying a landfill tipping fee. Mr. Chisholm stated he thought that the hybrid solid waste fee would not be pursued per past meeting discussions. Mr. MacDonald stated that he would investigate what was discussed.

As for cooperation with adjacent jurisdictions, Ms. Demers encourages the County to continue promote the Balls Ford Road Compost Facility as a regional facility and for staff to work with our regional partners on the development of a regional SWMP that could include Arlington County, Fairfax County and the cities of Manassas and Manassas Park.

Ms. Demers again stated that staff are currently reviewing the draft SWMP and plan to have the reviewed document to the SWAG committee by December for review. *(Presentation slides are attached to this document.)*

SWAG MEMBER GENERAL QUESTIONS/COMMENTS

Ms. Gorman addressed the issue of the methane gas odors from the last meeting. Staff looked at closed areas of the landfill and did identify some areas that could use repair. If committee members have any concerns or notice any odors, contact us as soon as possible.

There was also concern about the European wasps affecting our beehives on site. Staff reached out to our beekeeper, Louise Edsel. Ms. Edsel stated that when one or a few wasps enter a hive, the bees will ball up and overheat the wasps, killing them. Ms. Edsel does not feel that the bees are in any threat of being overrun and taken over by the wasps. Ms. Gorman stated that if wasps are found, Ms. Edsel indicated there are special traps we can utilize.

Ms. Gorman continued by stating last month a SWAG member suggested changing the meeting start time to 6:30 p.m. or later. Staff will poll the SWAG members about the meeting start time and will share that feedback with the group.

Mr. Chisholm asked if any thought had been given to going back to in-person meetings. Ms. Gorman replied that that is something that can also be asked in the poll. If it is determined to go back to in-person meetings, the county does require wearing of masks.

Ms. Gorman asked if members would like to continue meeting monthly or if they felt it best to meet every other month. Mr. Arvin asked if Ms. Gorman found these meetings useful. To which she replied, yes. Some meetings such as this one where the group reviews the SWMP helps the County meet regulatory requirements. We cannot develop the SWMP without input from the SWAG. The DEQ also suggested that conceptual landfill designs be presented to the SWAG.

Ms. Strand would like to have the meeting presentations sent to her within the week of the meeting. This allows her to compile notes and report back to other community groups she is active in. Mr. MacDonald stated he would send her the presentation slides after the meeting. Ms. Strand also stated that Keep Prince William Beautiful is experiencing a lot of turnover and has a new executive director. This new director is working on a new strategic plan and building more partnerships within the community. Currently, they are working with the owner of Manassas Mall to stop illegal trash dumping. They are also partnered with the Prince William County bus system to help clean up bus stations.

Mr. MacDonald thanked everyone for their time and adjourned the meeting.

ADJOURNMENT

Mr. Scott MacDonald adjourned the meeting at 5:26 p.m. The next SWAG meeting is scheduled for Thursday, November 18, 2021, at 4:00 p.m. via Microsoft Teams.



PRINCE WILLIAM
COUNTY

Review of Landfill Phase IV Conceptual Design Options

Solid Waste Advisory Group
Meeting of October 21, 2021

Background

- County is obligated to provide reliable, long-term disposal options.
- County landfill in operation at existing site since 1969.
- About 10 to 12 years of permitted disposal capacity remains.

Evaluation of Alternatives

- County has actively pursued other existing and emerging disposal methods—no viable in-County alternatives to landfilling.
- Out-of-County options, including transfer, would increase costs and may not be viable long term.
- No alternative technologies are currently viable and reliable for large volumes of mixed waste.
- County will continue to pursue alternative treatment and disposal technologies to reduce reliance on landfilling.

Future Phase IV

- Purpose—permit additional disposal capacity on existing site.
- Intent is to maximize the life of the existing landfill location.
- Estimated 8 to 10 years to complete Phase IV permitting and initial construction.
- Three design options presented at September 2021 SWAG meeting.

Phase IV Conceptual Designs

PWC Landfill–Phase IV Scenarios Comparison



9/7/2021

Item	Unit	Scenario 1	Scenario 2	Scenario 3
Waste Cell Area	AC	168	260	258
Estimated Disposal Capacity	CY	20,000,000	50,000,000	105,000,000
Estimated Life	Years	22	48	84
Estimated Gross Asset Value	2021 Dollars	\$660,000,000	\$1,650,000,000	\$3,465,000,000
Approximate Wetlands Impact	AC	6	35	38
Estimated Construction and Wetlands/ Stream Compensation Costs	2021 Dollars	\$138,000,000	\$232,000,000	\$247,000,000
Estimated Cost per CY of Disposal Capacity	2021 Dollars	\$6.90	\$4.64	\$2.35

Questions and Comments?



Process

Started Planning Process in October 2020

Identified Needs and Solicited SWAG Input
(October 2020 to April 2021)

Incorporated SWAG Input into Draft
SWMP

SWAG Input on Implementation Schedule

SWMP Format

1

• Executive Summary

2

• Introduction & Purpose of Plan

3

• Planning District Description and Conditions

4

• Waste Generation & Composition

5

• Waste Management System Overview

6

• System Funding

7

• Public Participation

8

• Needs Assessment

9

• **Waste Management Initiatives**

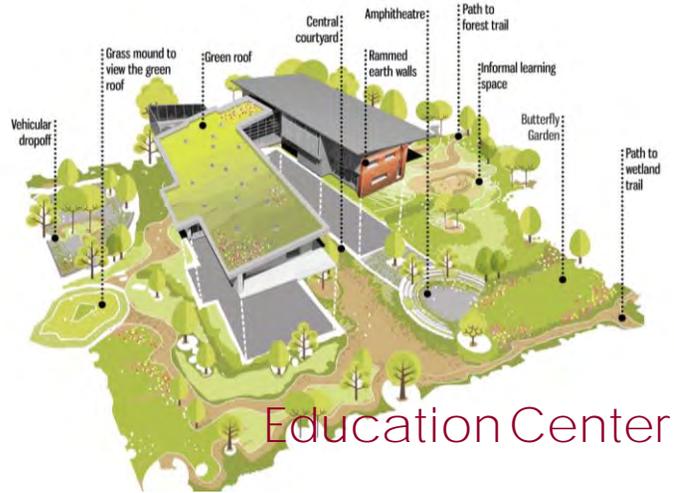
Waste Management Initiatives Implementation Schedule

Short Term	Medium Term	Long Term
1 to 5 Years	6 to 10 Years	10 to 20 Years

SWAG Input - Goals

Goal	Description
1	Continue to provide a cost-effective and environmentally protective sanitary landfill within the County for the disposal of non-recycled municipal solid waste (MSW) and to extend the life of the landfill for as long as possible.
2	Ensure that efficient MSW collection services are available for County citizens at a reasonable cost.
3	Continue the implementation of a County-wide recycling plan , including yard waste composting, that will meet or exceed the recycling rate mandated by the Virginia DEQ.
4	Continue and expand solid waste source reduction and reuse programs.
5	Coordinate with the private sector to help find cost-effective recycling and disposal options for construction and demolition debris (CDD) remain available for businesses engaged in construction activities within the County.
6	Continue to provide adequate collection services for special wastes (e.g., HHW, medical waste, litter, etc.) generated within the County.
7	Provide adequate funding for implementing County solid waste management programs.
8	Continue cooperation with adjacent jurisdictions to implement beneficial solid waste management programs on a regional basis.

Future Use of the Landfill

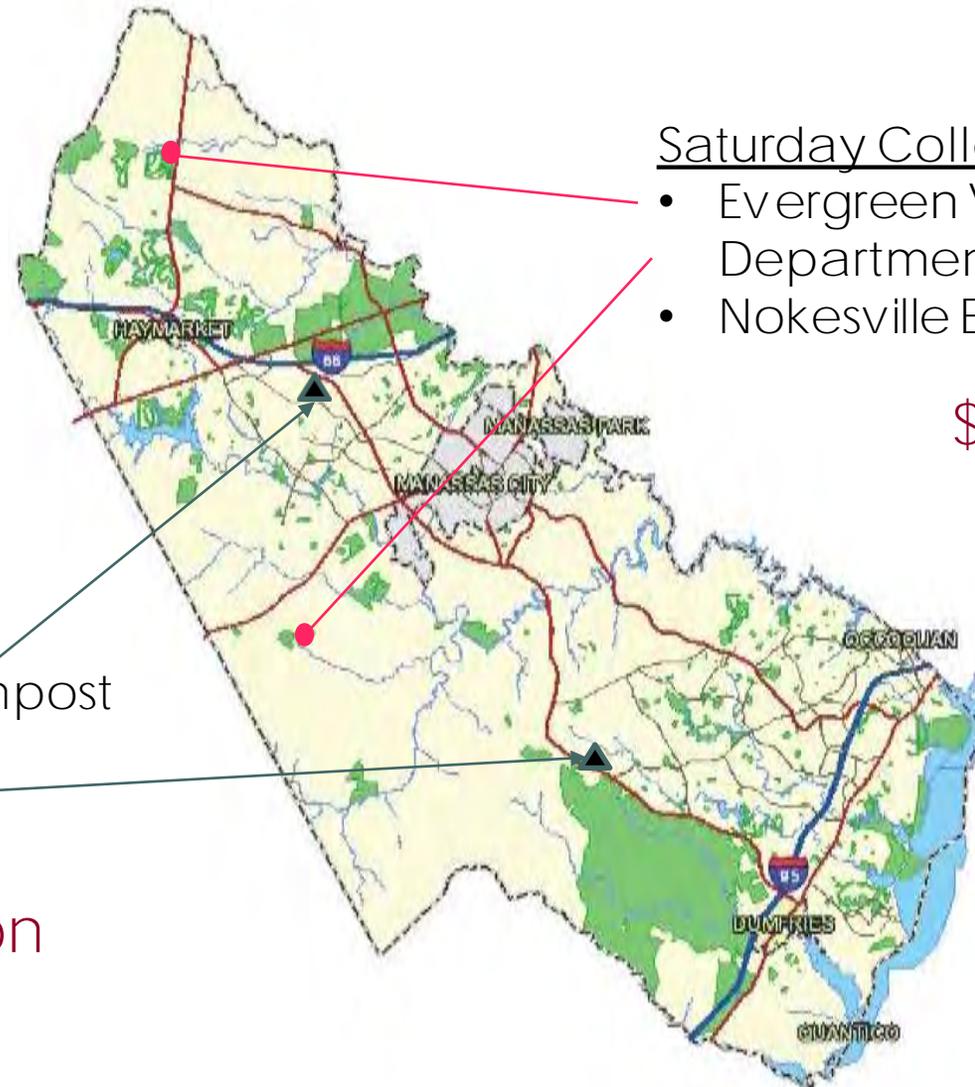


Waste Management Initiatives

Disposal

Initiative	Implementation Schedule
Assess feasibility of alternative technologies to conserve landfill capacity	Long
Develop Eco-Park including education center and solar/wind energy	Long
Continue to: <ul style="list-style-type: none">• Monitor remaining capacity and expansion requirements of the landfill• Design and construct new landfill cells, including Phase IV , to ensure adequate capacity• Operate the Landfill in compliance with applicable regulations• Maximize the utilization of landfill gas/methane for beneficial energy uses	

Solid Waste Collection Points



Saturday Collection Sites

- Evergreen Volunteer Fire Department
- Nokesville Elementary School

\$6 per Patron

Solid Waste Facilities

- Balls Ford Road Compost Facility
- Landfill

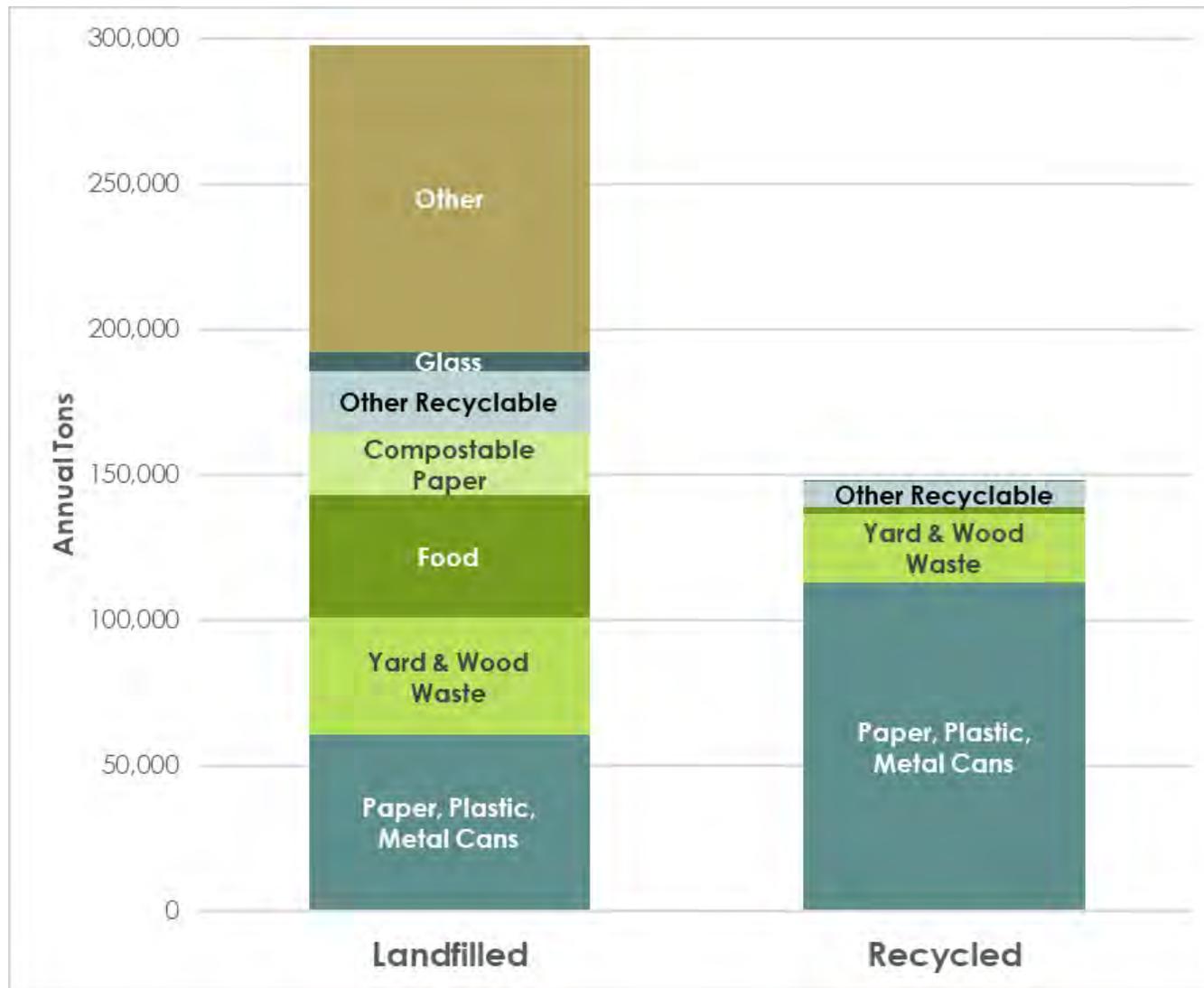
\$4 per Patron

Waste Management Initiatives

MSW Collection Services

Initiative	Implementation Schedule
Eliminate Saturday Drop-off Program	Short
Consider development of additional convenience centers	Medium
Consider options for management of collection contract for Yorkshire District	Short
Continue to: <ul style="list-style-type: none">• Evaluate the efficiency and cost-effectiveness of MSW collection services• Administer licensing program for solid waste haulers• Enforce MSW collection requirements of Prince William County Code of Ordinances, Chapter 2 – Refuse License	

2019 Disposed & Recycled Tons



Recycling (composting) food scraps and compostable paper could increase Recycling Rate to 50%

Balls Ford Road Phase 1 Expansion



Waste Management Initiatives

Recycling Plan

Initiative	Implementation Schedule
Promote food scrap recovery program with commercial sector	Medium
Expand curbside collection services to include collection of food scraps	Medium
Expand glass recycling collection at other recycling trailer locations	Short
Identify Areas of the County with low participation and/or high contamination rates for targeted outreach and education	Short
Continue to: <ul style="list-style-type: none"> ● Evaluate opportunities for increasing recycling in businesses, institutions, and multifamily dwelling units ● Expand the types of recyclables collected in the County, as feasible ● Evaluate additional locations for recycling trailers 	



The Donation Place

NOTICE

Waste Management Initiatives

Source Reduction and Reuse

Initiative	Implementation Schedule
Promote backyard composting	Short
Promote reuse/donation opportunities at thrift stores and Habitat for Humanity ReStore	Short
Contract with non-profit organization for operation of the Donation Center at the landfill	Short
Increase resident and business awareness about wasted food and food recovery	Short
Continue to: <ul style="list-style-type: none"> ● Identify and promote source reduction and reuse alternatives through public education ● Offer textile donation bins at convenience centers 	

Construction/Demolition Debris (CDD)

Landfill accepts
small quantities
of CDD from
residential
customers

*2.5 cubic yards
(Pickup Truck)*



Waste Management Initiatives

Construction & Demolition Debris

Initiative	Implementation Schedule
Promote local CDD reclamation facilities to construction companies	Short
Encourage deconstruction, salvage, and recovery prior to demolition	Short
Evaluate the feasibility of segregating recyclable CDD materials such as concrete, asphalt, or wood that can be accepted at the landfill for a fee and then transported to a CDD reclamation facility	Medium
Consider accepting segregated loads of clean wood for composting at the Balls Ford Road Compost Facility	Short
Identify soil/dirt disposal locations	Short
Continue to: <ul style="list-style-type: none"> Support private CDD recycling initiatives in the County and regionally 	

Special Waste

- Motor Oil
- Antifreeze
- Batteries
- White Goods
- HHW
- Yard Debris
- Food Scraps



Waste Management Initiatives

Special Waste

Initiative	Implementation Schedule
<p>Continue to:</p> <ul style="list-style-type: none">• Evaluate and expand, as necessary, collection services for household hazardous waste, and other wastes that require special handling, transport, and disposal.• Collect used motor oil, oil filters, antifreeze, and car batteries at convenience centers• Support local hospital and medical community efforts to ensure regulated medical waste is properly handled and disposed	

Solid Waste Fee

Line Item on Real Estate Property Tax Bill

(Fee has not changed since 1999)

Residential	Non-Residential
<ul style="list-style-type: none">• Single Family Home - \$70• Townhouses - \$63• Mobile Homes – \$56• Multi-Family Units - \$47	<p>Based on type and size of business/organization</p> <ul style="list-style-type: none">• PWC Schools - \$544,000• Reg. Shop Ctr - \$67,296• Retail - \$7,663• Motel - \$5,539• Fast Food - \$4,917• Gas Station - \$1,491• Medical Low-Rise - \$743

Waste Management Initiatives

Funding

Initiative	Implementation Schedule
Increase solid waste user fees to cover all operational and capital expenses	Short
Consider phased increase in solid waste fee to cover Phase IV landfill expansion	Short
Consider hybrid fee (combination of solid waste user fee and landfill tipping fee)	Short
Continue to: <ul style="list-style-type: none">• Evaluate the adequacy of the solid waste user fee to fund programs	

Waste Management Initiatives

Cooperation with Adjacent Jurisdictions

Initiative	Implementation Schedule
Encourage regional utilization of Balls Ford Road Compost Facility for residential and commercial organics	Short
Consider developing a regional Solid Waste Management Plan	Long
<p>Continue to:</p> <ul style="list-style-type: none">• Participate in Northern Virginia Regional Commission Solid Waste Board and Metropolitan Council of Governments to be informed of and to identify regional opportunities for solid waste management• Continue “trash trade” agreement with Fairfax County	

What's Next

Staff Reviewing Draft SWMP

Incorporate SWAG Input on Waste Management Initiatives

Solicit SWAG Input on Final SWMP

Finalize SWMP