

Rappahannock Regional Solid Waste Management Board Annual Financial & Operational Report

Fiscal Year 2020





Rappahannock Regional Solid Waste Management Board

489 Eskimo Hill Road • Stafford, Virginia 22554 • 540-658-5279 • FAX 540-658-4523

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Mission and Vision

R-Board Mission

The mission of the Rappahannock Regional Solid Waste Management Board (R-Board) is to provide professional, courteous, and intelligent service and solutions to the waste disposal needs of citizens residing in Stafford County and the City of Fredericksburg.

R-Board Vision

The R-Board's vision is to operate the best landfill in Virginia. Being the best landfill includes environmentally sound solid waste management policies and having an active Reduce, Reuse, and Recycling program, all coupled with outstanding customer service. The R-Board intends to continually strive to be a leader in the waste management industry and to set the example for others to emulate.



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Virginia Environmental Excellence Program

The R-Board Regional Landfill remains an E3 certified facility within the Virginia Environmental Excellence Program administered by the VA Department of Environmental Quality. In order to be qualified as an exemplary environmental enterprise, a facility must have a good compliance history, a fully implemented environmental management system, and demonstrated performance.





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Operational Overview

COVID-19

The landfill was deemed an Essential Business during the COVID-19 restrictions and closures. As a result, there were no adjustments implemented to the commercial operations; however, the residential convenience centers were closed Sundays and Mondays starting in April. The residential center closure was due to a decrease in workforce labor of about 250 hours per week as the Stafford County Detention Center implemented procedures to restrict the possibility of contracting COVID-19 within the detained population.

The R-Board Administrative Office implemented telework schedules to limit the number of people in the building and closed the office to the public. Administrative staff also assisted in preparation of personal protection equipment (PPE) to be distributed weekly to all staff. A new cleaning program and social distancing continues to keep the staff safe and healthy.

EQUIPMENT

The R-Board purchased the following equipment this fiscal year:

John Deere Articulating Dump Truck (\$410,361)





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John Deere Tracked Loader (\$355,192)



Mack Roll-Off Truck (\$162,437)



Ford Pick-Up Truck (\$31,870)



The R-Board planned to purchase a GPS system for working face equipment, but unfortunately this purchase is postponed due to COVID-19 budget constraints.



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COMMUNITY SERVICE

Every year members of the R-Board help out the community in many different ways. The biggest contributor would be the accepting of yard debris after major storms with no charge to the residents. Other notable community services were donating food at Thanksgiving to S.E.R.V.E., and ringing the bell for the Salvation Army during the Holiday season.



RENOVATIONS

The R-Board had various renovation projects this fiscal year. The breakroom area previously had a nonfunctioning large sink and has since received an updated two-person stainless steel, deep sink, with both hot and cold running water. The breakroom walls were also updated to have a more modern look.

The Administrative office moved from the Rowser building to the old animal shelter located next to the landfill, at 473 Eskimo Hill Road. To prepare for the move, the building was deep cleaned, re-painted, had new flooring installed, new doors to create separate wings, and a front office area was created. The offices were furnished by a combination of using existing furniture and claiming excess furniture from different departments, and Stafford Public Schools .

Additionally, the Maintenance Manager's desk in the shop area was made from primarily salvaged material that came from the landfill.

Beginning of construction of Cell F-3

In April a contract was awarded to Sargent Construction for the construction of cell F-3. After the procurement process and a meeting with Stafford County's Erosion and Sediment Control department, Sargent was able to begin construction in May.



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Regulatory Overview

The R-Board maintains a number of permits with the VADEQ and federal regulatory agencies. These Permits are the Solid Waste Permit (SWP) that covers groundwater, landfill gas, and leachate monitoring programs; Title V Air permit that covers emissions per the Clean Air Act; Virginia Pollutant Discharge Elimination System (VPDES) that covers stormwater; and the U.S. Fish and Wildlife Bird Depredation Permit.

Solid Waste

The R-Board's request to resurrect and approve the Alternative Points of Compliance (APC) is still pending with DEQ. The request is to include two groundwater monitoring wells to replace three current wells.

The R-Board is constructing a new landfill cell and expects the cell to be operational early 2021.

Air Permit

At the end of FY2020, the R-Board began working on the New Source Review permit revision in preparation to begin to renew the Federal Operating Title V air permit application. These permit revisions and renewals are on-going and will be completed in FY 2021.

Stormwater

Stormwater sampling is required twice a year. The R-Board has four VPDES permitted stormwater ponds and outfalls to sample. Field measurements indicate that the naturally occurring runoff is acidic due to the acid sulfate soils present on the property.

The Regional Landfill must comply with numerous additional state and federal regulations requiring constant vigilance and continuing education of our staff. We constantly review procedures to better position our operations to stay in compliance.



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Employee Achievements and Accolades

The R-Board continues to encourage and support employees as they seek certifications and continuing education to improve their skills and knowledge. The following are courses and trainings staff has participated in:

- OSHA 10 Hour General Industry Seminar (Certifications received)
- Stormwater Pollution Prevention Plan Training
- First Aid, CPR, & AED Training (Certifications received)
- Mental Health First Aid Training (Certifications received)
- Various COVID-19 Safety Policies & Procedures

The R-Board appreciates and recognizes the following employees for significant milestones of their years of service with the R-Board and Stafford County:

- Mike Cross – 5 years
- Roy Whaling – 25 years

The R-Board recognizes and welcomes the following employees hired in FY2019:

- Joe Buchanan
- Bill Froelich
- Will Graham
- John Zyla
- Stephen Hall



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Operational and Financial Performance

Residential Usage Fee

The Residential user fees increased in FY2020 to the following:

- One-time pass \$4 to \$5
- Coupon book \$30 to \$40
- Annual pass \$100 to \$120

In addition to the increases, a \$20 fee was incorporated for oversize residential loads. This fee is distinguishable from the \$20 fee for commercial loads that are estimated to be less than half a ton. Overall Residential fee revenue increased from FY2019 (\$624,082) to FY2020 (\$760,655).

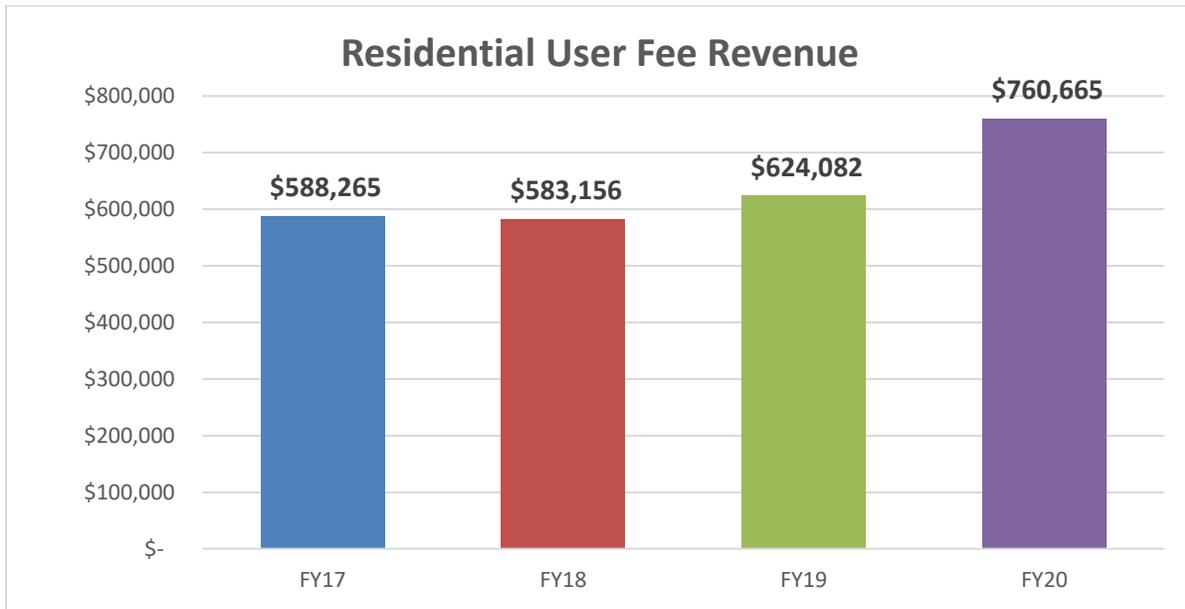


Figure 1 Residential User Fee Revenue



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The R-Board discontinued sales at the Administrative office effective October 1, 2020 in preparation for the move to the old animal shelter located next to the landfill. Sales opportunities are still available at Eskimo Hill Landfill, Stafford Treasurer, City of Fredericksburg, and Online. The following charts show the revenue by sales location, the distribution of revenue, and the transaction distribution.

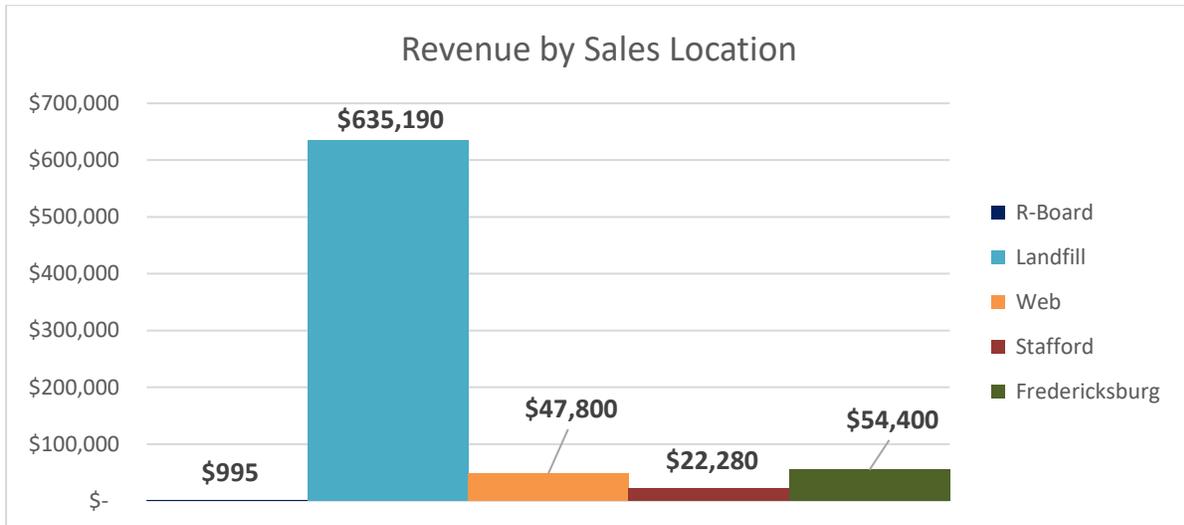


Figure 2 Revenue by Sales Location

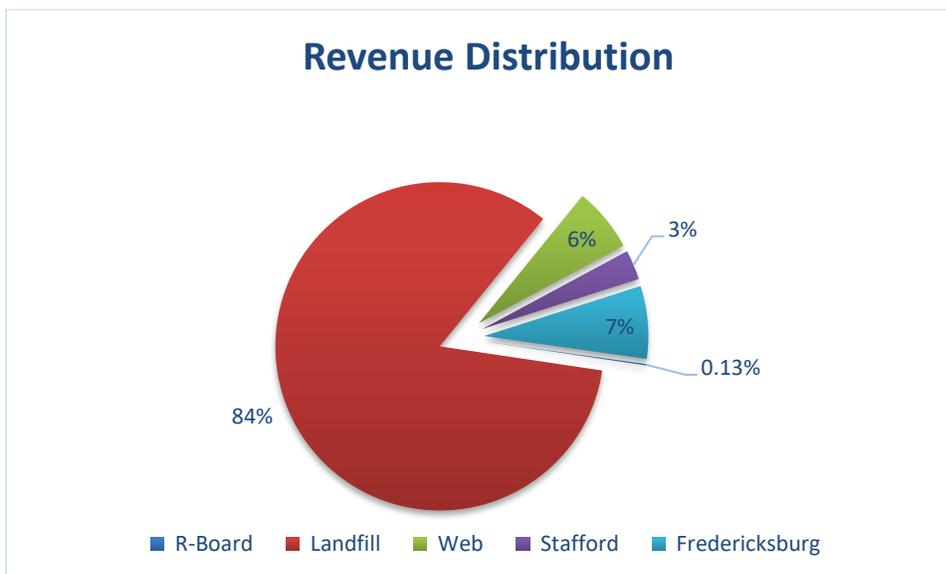


Figure 3 Revenue Distribution



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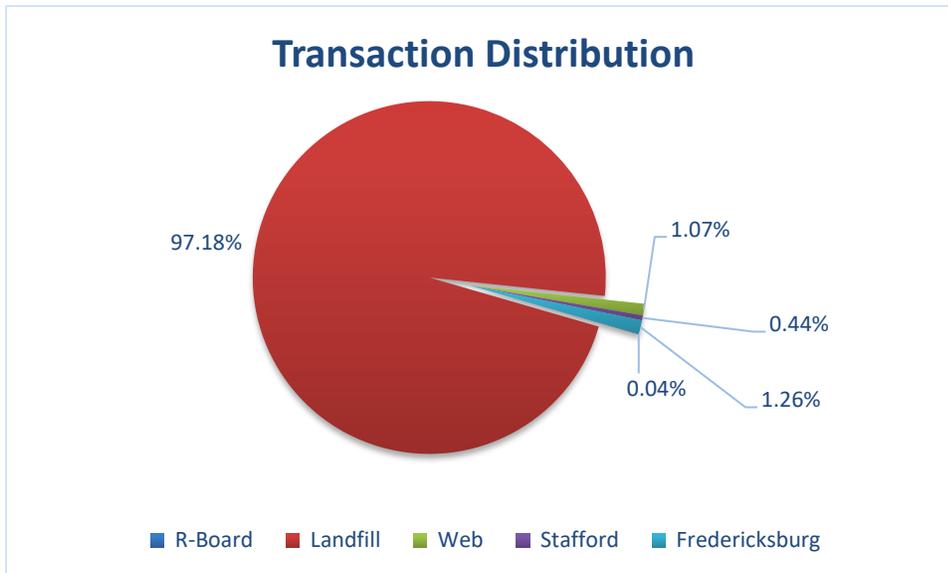


Figure 4 Transaction Distribution

The landfill conducts the highest percentage of individual transactions as well as generates the most revenue. The City Treasurer’s office and online sales generate 7% and 6% of revenue, respectively while conducting just over 1% of the transactions.

The most purchased user fee type is the one-time pass as depicted below:

Type	Transactions	Revenue
Daily Pass	44,533	\$ 222,665
Oversized Load	5,068	\$ 101,360
Coupon Books	3,881	\$ 77,620
Annual Pass	2,345	\$ 281,400

Table 1 User Fee Transaction & Revenue



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Financial Summary (Unaudited)

	Adopted FY20	Actuals	Inc/Dec
Interest	\$ 50,000	\$ 89,040	44%
Recycling	\$ 90,000	\$ 62,438	-44%
Commercial	\$ 6,250,000	\$ 6,564,312	5%
Grants	\$ 25,000	\$ 23,315	-7%
Residential Fees	\$ 685,000	\$ 763,441	10%
Municipal Services			
Fredericksburg	\$ 283,200	\$ 238,248	-19%
Stafford	\$ 40,000	\$ 40,000	0%
Sludge/Utilities			
Stafford	\$ 350,000	\$ 413,013	15%
Fredericksburg	\$ 140,000	\$ 119,792	-17%
Ameresco Lease	\$ 50,000	\$ 60,496	17%
Milestone Lease	\$ 12,000	\$ 12,074	1%
Miscellaneous Sources	\$ 5,000	\$ -	-100%
Total	\$ 7,980,200	\$ 8,386,169	5%



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Weight and Material Summary

CATEGORY	FY2020 Y-T-D <u>Weight</u>	FY2019 Y-T-D <u>Weight</u>	Difference <u>%</u>
Billable			
Commercial Waste	61307	63471	-3%
Residential Waste	52558	41726	26%
Fredericksburg	6414	8234	-22%
Eskimo Hill	20403	21403	-5%
Belman Road	1329	1453	-9%
Mixed Surcharge add \$30/T	115	163	-30%
Debris Waste	61888	67824	-9%
Dirt	1877	3690	-49%
Tires Commercial	344	456	-24%
Sludge (city)	4279	5044	-15%
Sludge (county)	13245	14071	-6%
Yardwaste	1288	364	254%
BILLABLE TONNAGE	225047	227898	-1%
Non-Billable			
Litter/Cleanups	70	54	30%
Recycling	5177	7332	-29%
TOTAL TONNAGE	230294	235283	-2%



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Portfolio Composition

Security Type		% of Portfolio
U.S. Agencies and Securities	\$ 4,832,556	52.69%
Municipal Bonds	\$ 430,177	4.69%
Corporate Notes and Bonds	\$ 961,346	10.48%
Certificates of Deposit	\$ 941,018	10.26%
Commercial Paper	\$ 1,848,010	20.15%
Money Market Mutual Funds	\$ 158,197	1.73%
Total	\$ 9,171,303	100.00%

Table 2 Portfolio Composition

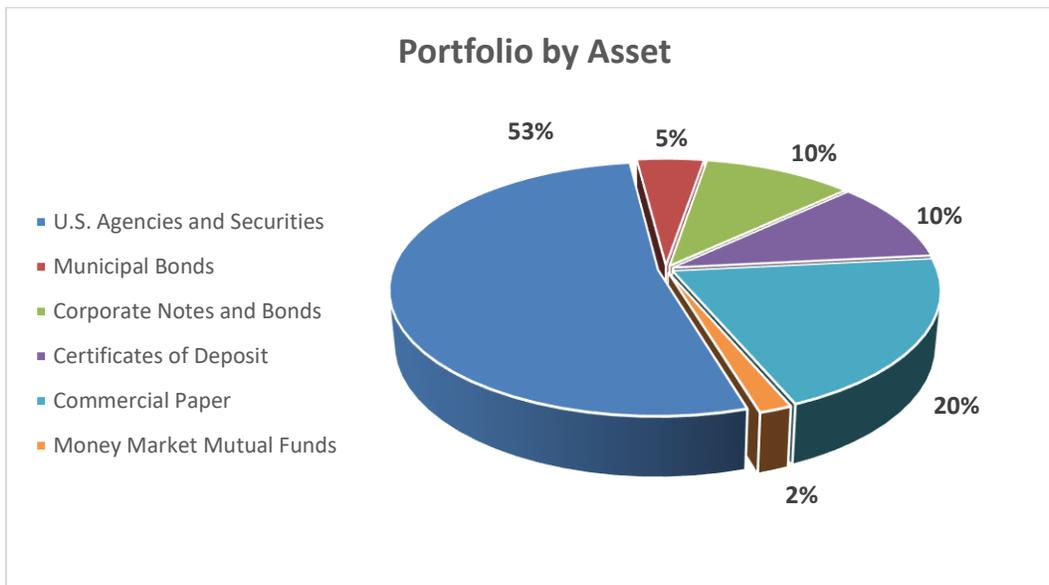


Figure 5 Portfolio by Asset



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Recycling and Diversion

The following locations accept residential recyclables:

City of Fredericksburg

Belman Road Recycling Center

1200 Belman Road

Hugh Mercer Elementary School

2100 Cowan Boulevard

Walker Grant Middle School

1 Learning Lane

Stafford County

Regional Landfill

489 Eskimo Hill Road

Rowser Building

1739 Eskimo Hill Road

Gayle Middle School

100 Panther Drive

The primary goal of the R-Board is to divert materials from landfilling in the most efficient manner. Previously, recycling was leading the single stream recycling system at the Landfill has been severely impacted by the market fluxes of the past two years. Nearly \$140,000 was budgeted in FY2020 to manage the single stream recycling program. The average cost to market single stream material is \$60 per ton whereas; the average disposal tipping fee is \$40 per ton. The single stream intake has been reduced to only include recycling from the City of Fredericksburg's collection and R-Board recycling from the residential convenience centers and mobile drop-off sites.

Looking towards the future, the R-Board anticipates an evolution of our methods for waste diversion in order for the primary goal to be met. It should be noted that due to COVID-19 resources and funding will be impacted, and these impacts may cause delays.

R-Board staff prepared requests for proposals (RFP) for recycling, grinding of yard debris; as well as, the possibility of food waste composting. A variety of options will be explored, such as:

- Public-Private Partnerships
- Host site options
- Revised list of recyclable materials
- Increasing incoming tonnage
- Trans-loading offers
- Targeting and separation of valued commodity material



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In response to the fluxes in the recycling market, the R-Board implemented changes to add value to single stream materials. One such change was a cardboard capture program that came to fruition as a result of significant amounts of cardboard being deposited in trash containers and staff observing residents' hesitation to break down boxes. The cardboard dedicated containers are well signed and average 27 tons per month of additional material.

A second change was to provide an outlet for glass separation. This voluntary program averaged 4 tons per month in the first ten months; while the last half of FY2020 averaged 16 tons per month. The materials are collected at both Eskimo Hill and Belman Road convenience centers. The glass from Eskimo Hill is ground to be used as roadbed base onsite; whereas the glass from Belman is sent to Fairfax County as part of their glass recycling operations to ground the material into various size of aggregate – including sand. This benefits both the environment and R-Board budget as the material can be used in place of quarried stone.





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The Commonwealth of Virginia mandates that localities must prove a 25% recycling rate. The R-Board conducts a voluntary recycling audit of commercial entities within its jurisdiction and for calendar year 2019, the Department of Environmental Quality (DEQ) approved the 33.9% rate submitted. The audit concluded lower responses from companies in comparison to past audits. Of the five top single stream collectors in the area, only one reported their single stream collection amounts. It is probable that companies stopped recycling programs due to the associated costs; as well as, the impact of COVID-19, since the audit was conducted during the early stages of the pandemic.

Due to the impacts on the R-Board budget, commercial single stream was discontinued effective June 1, 2019. An average of 135 tons of single stream per month equates to a 39% decrease in weights. The DEQ report form actually was at 36.3% overall recycling and diversion

Sources of Recycling Report Data	2018	2019	Percent Change
Commercial Recycling Audit	73,509 tons	64,750 tons	Decrease of 12%
Primary Recycled Materials Total	67,053 tons	58,103 tons	Decrease 13%
Overall Waste Generation	129,262 tons	142,903 tons	Increase 10.5%
R-Board Intake of Single Stream	4,085 tons	2,490 tons	Decrease of 39%

Table 3 Recycling Audit Data

Household Hazardous Waste Collection

The R-Board performed two collection events in Fiscal Year 2020. The first event was at the Stafford County Government Center in July 2019. The second event was held at the City Shop in Fredericksburg in November 2019. A total of 880 residents came to the two events. The total bulk/box equivalent gallons were estimated at 12,250 gallons of hazardous material. At recent events, the R-Board began collecting latex paint rather than have the contracted company manage the material. Staff then dries out the paint to landfill the material, which has saved an estimated \$6,480. In following suit for the cardboard capture program residentially, the R-Board brings a 40 yd container to collect and recycle cardboard.



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The R-Board continues to provide waste oil and antifreeze collection and recycling to residents. Staff reported 28,655 gallons of oil and antifreeze collected in 2019. This program is accompanied by the fluorescent bulb collection and recycling where 44,450 linear feet of fluorescent bulbs and 1,700 compact bulbs have been collected in FY2020.

Litter Control

Goals:

- Coordinate efforts from available resources: paid staff, volunteers, partnerships and organizations
- Focus Litter Pickup efforts on high traffic areas in Fredericksburg and Stafford
- Provide timely response to citizen calls on particular areas of concern

Programs:

- Rappahannock Regional Jail (RRJ) Inmate Roadside Litter



- Rappahannock Region Jail (AAP) Adult Probationer Program
- Rappahannock Area Office on Youth (OOY)
- Community Cleanups & One Time Special Cleanup
- Neighborhood or Volunteer Cleanup
- Illegal Sign Removal
- Social Media & Website Messaging

R-Board staff monitors roadways for the City of Fredericksburg and Stafford County and collects litter by using both paid and non-paid labor. In FY2020 687 miles of roadway was cleaned to remove 1,837,368 pounds of litter from our communities.

- 112 (volunteer) participants in litter collection program
- 39 Clean Up Special Events
- 585 Probationary and RRJ Assignees
- 579 non-paid hours



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Litter Grant

The R-Board applies for the Department of Environmental Quality Non-Competitive Litter Grant each year. Last year the R-Board received \$23,315. The R-Board manages grant activities for Fredericksburg and Stafford.

Community Outreach, Education, and Advocacy

The R-Board has a team of community advocates paid and volunteer. We are proud to share our messages to a broad-range of ages and interest groups. Below are a few examples of the many programs we attended last year:

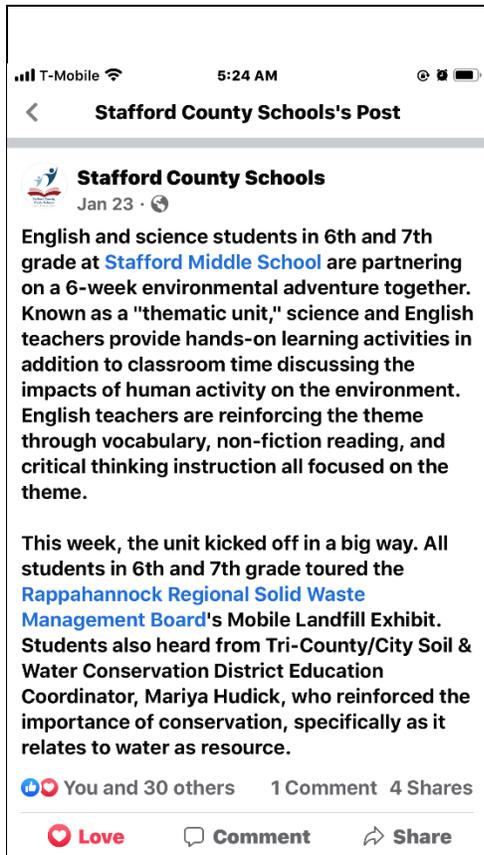
- Tabling in August at National Night Out at both Target & Aquia Harbour.
- Speaking at Stafford Rotary Club
- Sponsor (at no expense to R-Board) of B101.5 B-Flix event in Hurkamp Park
- Homeowner Association Sponsor Picnic (Tabling Events)





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We are very proud to have served as a resource to many school and scout initiatives. We impacted several hundred students at Stafford Middle School by supporting a 6-week cross curriculum environmentally themed English/Science unit. We also were delighted to contact the media and a front-page article was written on the collaboration in the Free Lance-Star.



Pandemic Protocols and Program Shift

In March, the world changed and our traditional outreach and education programs had to be suspended. Our focus switched to more virtual messaging and social media engagement. We celebrated Earth Day virtually and moved our Composting Classes to Google Hangouts with the Central Rappahannock Regional Library.

However, litter control community probation assignees increased vastly and additional staff hours were required to manage a large influx of probationary workers, as other options (Goodwill, Salvation Army) were closed to probationary help. The R-Board's Clean Community Crew Staff had to shift to the landfill responsibilities as the Stafford Detention Center was unable to send any laborers to our site. The increase in probationary assignees helped control our road-side litter almost single-handedly through the end of the fiscal year. Those larger numbers are reflected in the statistics reported earlier in this document.



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Volunteers continued to shine during the COVID crisis. They continued their excellent work of litter collection, as we furnished them supplies (bags, vests, gloves, and pickers.) We are particularly grateful for retired educator Susan Kenney who makes it her mission to clean up litter on land – sea – or air. Susan is a resident of Hartwood and a former teacher. She has provided great insights on how to motivate young people to care about their environment. She cleans up while kayaking, walking, enjoying Curtis Park, and everywhere she goes. Below is a photo of her grandson helping her clean up at Curtis Lake.

