

MEMORANDUM

To: Board of Commissioners

From: CSWD Staff

Date: June 23, 2023

Re: Program Updates

- Solid Waste Management Fee and Disposal (Jon) – (see attached)
- Organics Recycling Facility (Dan) –
 - Despite running out of available compost in the second week of May, sales of blended soils products have remained strong and total material sales with a week remaining in the fiscal year are 7% or \$49,000 above budgeted amounts. It is anticipated that year-end sales will better expectations by approximately 9%.
 - Monthly billable food scraps for May totaled 319.3 tons. This is 4% above the previous month and is even with the FY22 average. It brings the fiscal year to date total to 3,713 tons – 9.5% or 391 tons below budgeted YTD projections.
 - Following many months of delay, the relocated ORF office and scale are open for business. The new setup includes an improved paved entrance with ample parking for residential food waste drop off. Final touches are still underway, but initial feedback from customers has been positive. The new scale and accompanying software are a big improvement over the previous system.
 - May 26th marked the first day that we were able to access water via the extended municipal water line that runs through the ORF. This was a very welcome event following an entire winter of difficulty obtaining water from offsite sources. The new hydrants are working great and staff is very happy with the water pressure and accessibility of the new system.
- Materials Recovery Facility (Josh)
 - YTD average monthly inbound single stream material: 3,644 tons
 - YTD average monthly marketed material: 2,914 tons
 - 12-month, average commodity revenue (ACR): \$77.61/ton
 - All data includes PGA tons and costs
- Compliance/Hazardous Waste (Josh and Jeannine) –
 - In May Josh and Jeannine conducted a construction site waste management visit at Beta Technologies' new manufacturing plant off of Williston Rd. The site visit was prompted by some loads observed during the load check intensive conducted in April.

- In June tank cleanings were performed by US Ecology on both the used oil tank at the Environmental Depot and the leachate tank at the closed landfill. Visual inspections were performed during both cleanings having found both tanks in good working order.
- In June a RCRA hazardous waste inspection was conducted at the Environmental Depot. This is an inspection that occurs every four years and is an intensive inspection on the operation and paperwork of the facility. The initial report from the state was that there would be no findings from the inspection.
- **Marketing & Communications** (Alise/Michele) –
 - The next iteration of the “We Can Take It” postcard hit mailboxes at the beginning of June. The postcard was sent to all Chittenden County households. This postcard focused on proper disposal of hazardous waste at the Environmental Depot.
 - The Marketing team has finished the recruitment ad and it is now running on a variety of cable networks. The team is watching the data to determine the success of the media buy with Effectv.
 - Communications about DOC hours, fees changes and the implementation of credit cards taking place on July 1 continue to rollout with print ads being placed in community papers, Vermont Maturity and Seven Days. Ads will roll out the first week in July and continue through the end of August. Website and Google Business changes are scheduled for end of day on 6/30.

Media Mentions – May/June

- 5/18/2023 Waste Advantage Magazine - [Vermont Passes First-in-the-Nation HHW EPR](#)
- 5/23/2023 Waste Today - [Vermont considers EPR program for household hazardous waste](#)
- 5/25/2023 Williston Observer - [Green Tips: Cleaning out your closet - responsibly](#)
- 6/16/2023 WCAX [Police investigate body found at Williston transfer station](#)
- 6/20/2023 NBC5 [Williston police identify man found dead at recycling facility](#)
- **Outreach (Beth):** The Waste Warrior program is back in full force. We have held three training sessions and already welcomed volunteers at the weekly South End Get Down and the Burlington Farmers’ Market. We have volunteers scheduled to also help out at Higher Ground and Shelburne Museum events. It’s shaping up to be a great summer already!!
- **Refillable water station project completed** - (Jen) – Attached is the Project Report from Green Up Vermont for the Supplementary Environmental Project (SEP) CSWD funded in the amount of \$79,844 for GUV to purchase and install refillable water bottle stations in schools and high-use municipal properties across Vermont. The SEP is the product of the settlement of an environmental enforcement action brought by the Vermont Attorney General, Agency of Natural Resources, and Natural Resources Board. We are thrilled that this project has successfully been completed and will help reduce litter and trash by reducing the number of single-use beverage containers used in Vermont.

- Legislative update (Jen) – the VT legislature reconvened this week primarily for the purpose of overriding the Governor’s veto on several bills. They also took up and passed H.158. This law will expand the scope of beverages subject to the beverage container redemption system and require manufacturers and distributors of beverages to participate in a producer responsibility organization to manage the collection and disposition of covered beverage containers. It is expected that the Governor will veto H.158.
H.67 was signed into law by the Governor on June 12. This law requires manufacturers of household products containing hazardous substances to provide education and outreach on proper disposal as well as convenient collection services for these products.

CHITTENDEN SOLID WASTE DISTRICT

Tons Disposed based on Solid Waste Management Fees (Year over Year)

Month	Total Tons per Month			
	FY 22 tons	FY 23 tons	Tons Diff.	% Diff
Jul	11,558	10,630	-928	-8.0%
Aug	11,729	12,808	1,079	9.2%
Sep	11,236	11,650	414	3.7%
Oct	11,289	11,126	-162	-1.4%
Nov	10,428	10,846	417	4.0%
Dec	10,583	10,293	-290	-2.7%
Jan	9,180	9,196	16	0.2%
Feb	7,402	7,823	421	5.7%
Mar	9,571	9,849	278	2.9%
Apr	10,137	10,387	251	2.5%
May	11,357	11,918	560	4.9%
Jun				
Total Tons YTD	114,470	116,526	2,056	1.8%
Mgmnt Fee \$ YTD	\$3,090,701	\$3,146,207	\$55,505	1.8%

	Tons	\$
FY 23 Budget	125,250	\$3,381,750
FY 23 Actual YTD	116,526	\$3,146,207
Difference	-8,724	(\$235,543)
FY 23 Actual % YTD vs Budget %	93.0%	
YTD % of Months	91.7%	

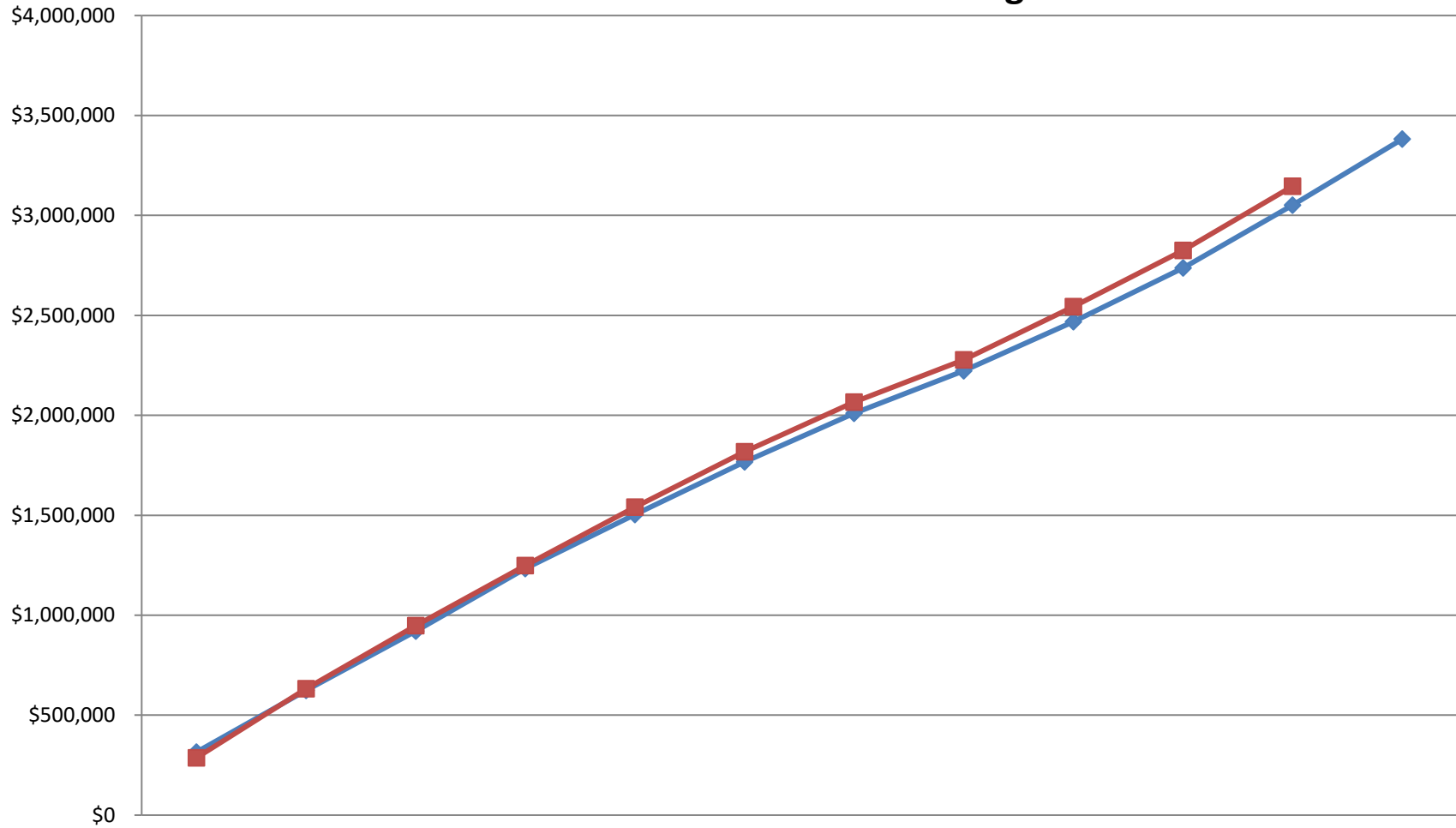
Chittenden Solid Waste District
Solid Waste Management Fee FY 23 (Budget versus Actual)

Time	Tons	\$/Ton	\$
FY 23 Budget	125,250	\$27.00	\$3,381,750

\$	Budget \$			Actual		Difference		% of YTD Budget
	Percent	\$ per month	\$ YTD	\$ per month	\$ YTD	\$ per month	\$ YTD	
Jul-22	9.3%	\$315,360	\$315,360	\$287,004	\$287,004	(\$28,356)	-\$28,356	91.0%
Aug-22	9.1%	\$309,307	\$624,667	\$345,828	\$632,832	\$36,521	\$8,165	101.3%
Sep-22	8.8%	\$296,148	\$920,815	\$314,558	\$947,389	\$18,410	\$26,575	102.9%
Oct-22	9.2%	\$312,149	\$1,232,964	\$300,415	\$1,247,804	(\$11,735)	\$14,840	101.2%
Nov-22	8.0%	\$270,445	\$1,503,409	\$292,829	\$1,540,633	\$22,384	\$37,224	102.5%
Dec-22	7.8%	\$263,009	\$1,766,418	\$277,909	\$1,818,541	\$14,900	\$52,123	103.0%
Jan-23	7.2%	\$244,193	\$2,010,611	\$248,286	\$2,066,827	\$4,093	\$56,216	102.8%
Feb-23	6.3%	\$211,395	\$2,222,006	\$211,217	\$2,278,045	(\$178)	\$56,038	102.5%
Mar-23	7.3%	\$245,915	\$2,467,921	\$265,918	\$2,543,962	\$20,003	\$76,041	103.1%
Apr-23	8.0%	\$269,435	\$2,737,356	\$280,460	\$2,824,422	\$11,025	\$87,066	103.2%
May-23	9.3%	\$314,251	\$3,051,607	\$321,784	\$3,146,207	\$7,533	\$94,599	103.1%
Jun-23	9.8%	\$330,143	\$3,381,750					

TONS	Budget Tons			Actual		Difference	
	Percent	Monthly Tons	Tons YTD	Tons per month	Tons YTD	Tons per month	Tons YTD
Jul-22	9.3%	11,680	11,680	10,630	10,630	(1,050)	(1,050)
Aug-22	18.5%	11,456	23,136	12,808	23,438	1,353	302
Sep-22	27.2%	10,968	34,104	11,650	35,088	682	984
Oct-22	36.5%	11,561	45,665	11,126	46,215	(435)	550
Nov-22	44.5%	10,016	55,682	10,846	57,060	829	1,379
Dec-22	52.2%	9,741	65,423	10,293	67,353	552	1,930
Jan-23	59.5%	9,044	74,467	9,196	76,549	152	2,082
Feb-23	65.7%	7,829	82,297	7,823	84,372	(7)	2,075
Mar-23	73.0%	9,108	91,404	9,849	94,221	741	2,816
Apr-23	80.9%	9,979	101,384	10,387	104,608	408	3,225
May-23	90.2%	11,639	113,022	11,918	116,526	279	3,504
Jun-23	100.0%	12,228	125,250				

CSWD - Solid Waste Management Fee Revenues Year-To-Date - FY 23 Actual v. FY 23 Budget



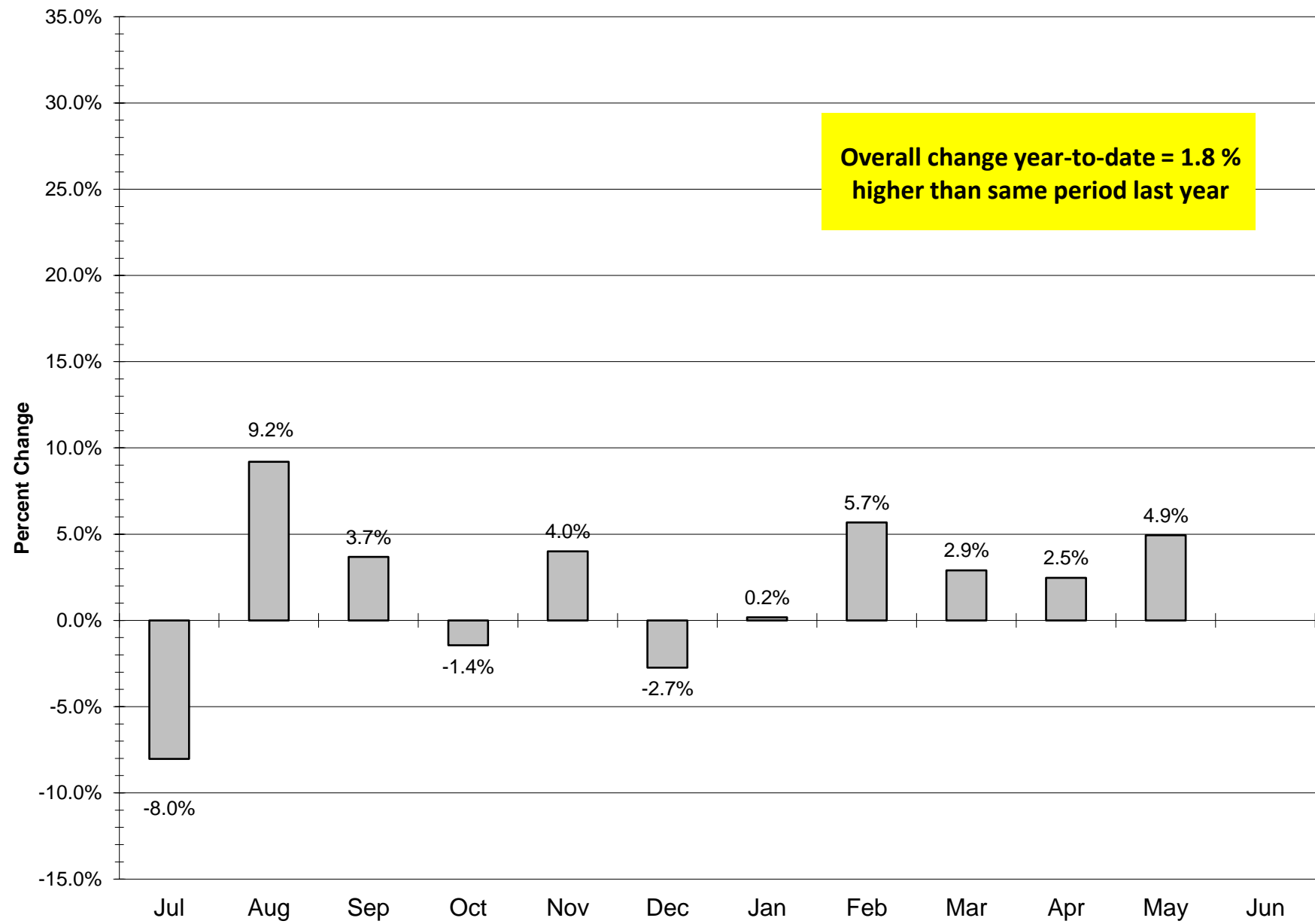
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
—◆— Budget	\$315,360	\$624,667	\$920,815	\$1,232,964	\$1,503,409	\$1,766,418	\$2,010,611	\$2,222,006	\$2,467,921	\$2,737,356	\$3,051,607	\$3,381,750
—■— Actual	\$287,004	\$632,832	\$947,389	\$1,247,804	\$1,540,633	\$1,818,541	\$2,066,827	\$2,278,045	\$2,543,962	\$2,824,422	\$3,146,207	

CHITTENDEN SOLID WASTE DISTRICT

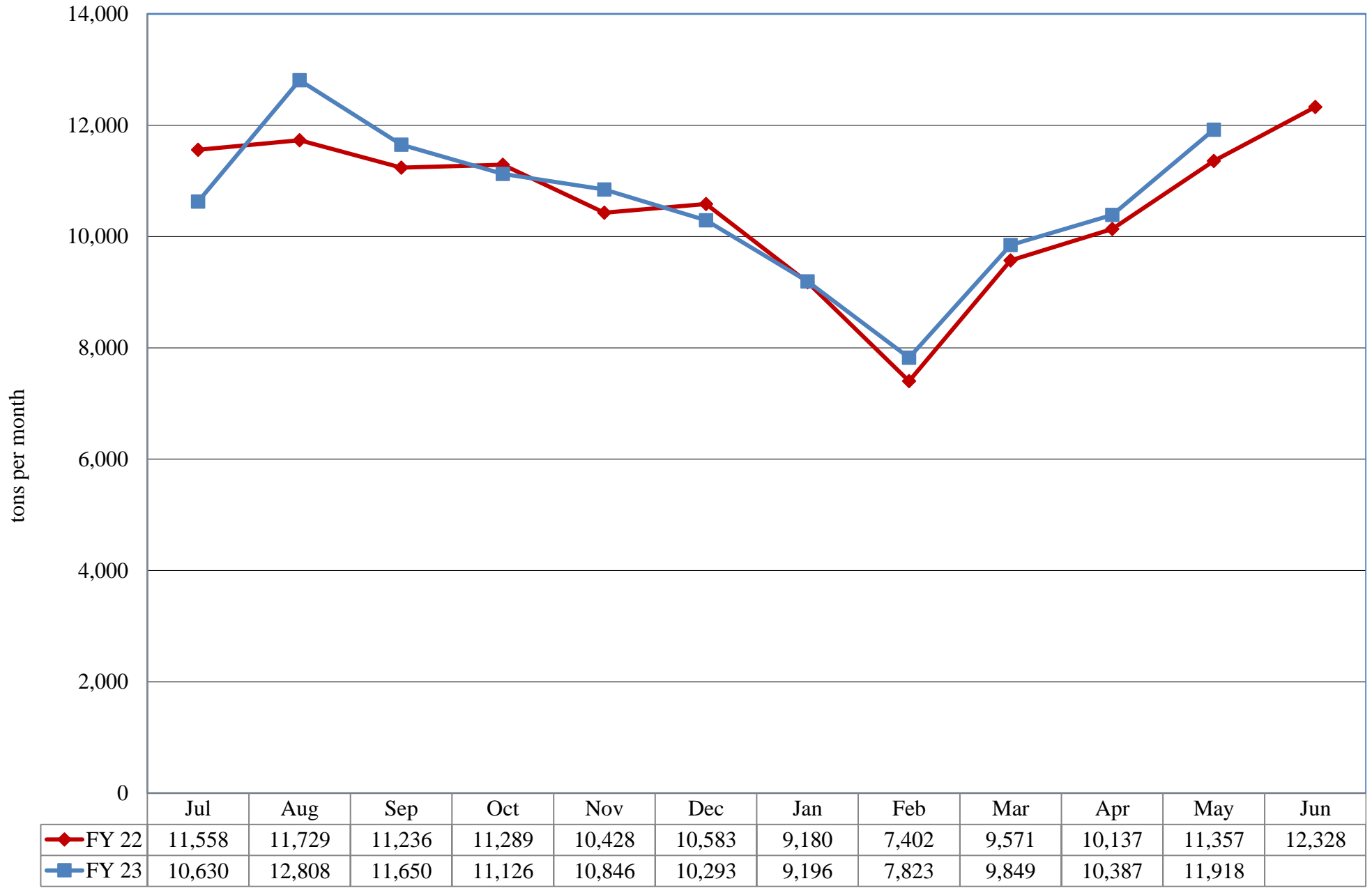
SWMF Tons Refuse Disposed per Operating Weekday

Month	FY 22			FY 23			Difference FY 23 vs FY 22			
	Monthly Tons	# Operating Weekdays	Avg Tons/Day	Monthly Tons	# Operating Weekdays	Avg Tons/Day	Monthly Tons	# Operating Weekdays	Tons/Day Tons	Tons/Day %
Jul	11,558	21	550.4	10,630	20	531.5	-928	-1	-18.9	-3.4%
Aug	11,729	22	533.2	12,808	23	556.9	1,079	1	23.7	4.5%
Sep	11,236	21	535.0	11,650	21	554.8	414	0	19.7	3.7%
Oct	11,289	21	537.6	11,126	21	529.8	-162	0	-7.7	-1.4%
Nov	10,428	22	474.0	10,846	22	493.0	417	0	19.0	4.0%
Dec	10,583	23	460.1	10,293	22	467.9	-290	-1	7.7	1.7%
Jan	9,180	21	437.1	9,196	22	418.0	16	1	-19.1	-4.4%
Feb	7,402	20	370.1	7,823	20	391.1	421	0	21.0	5.7%
Mar	9,571	23	416.1	9,849	23	428.2	278	0	12.1	2.9%
Apr	10,137	21	482.7	10,387	20	519.4	251	-1	36.7	7.6%
May	11,357	21	540.8	11,918	22	541.7	560	1	0.9	0.2%
Jun	0	22	0.0		22					
Total	114,470	258		116,526	258		2,056	0		
Average			443.7			451.7			8.0	1.8%

Difference in SWMF Tons Per Month Disposed
FY23 versus FY22

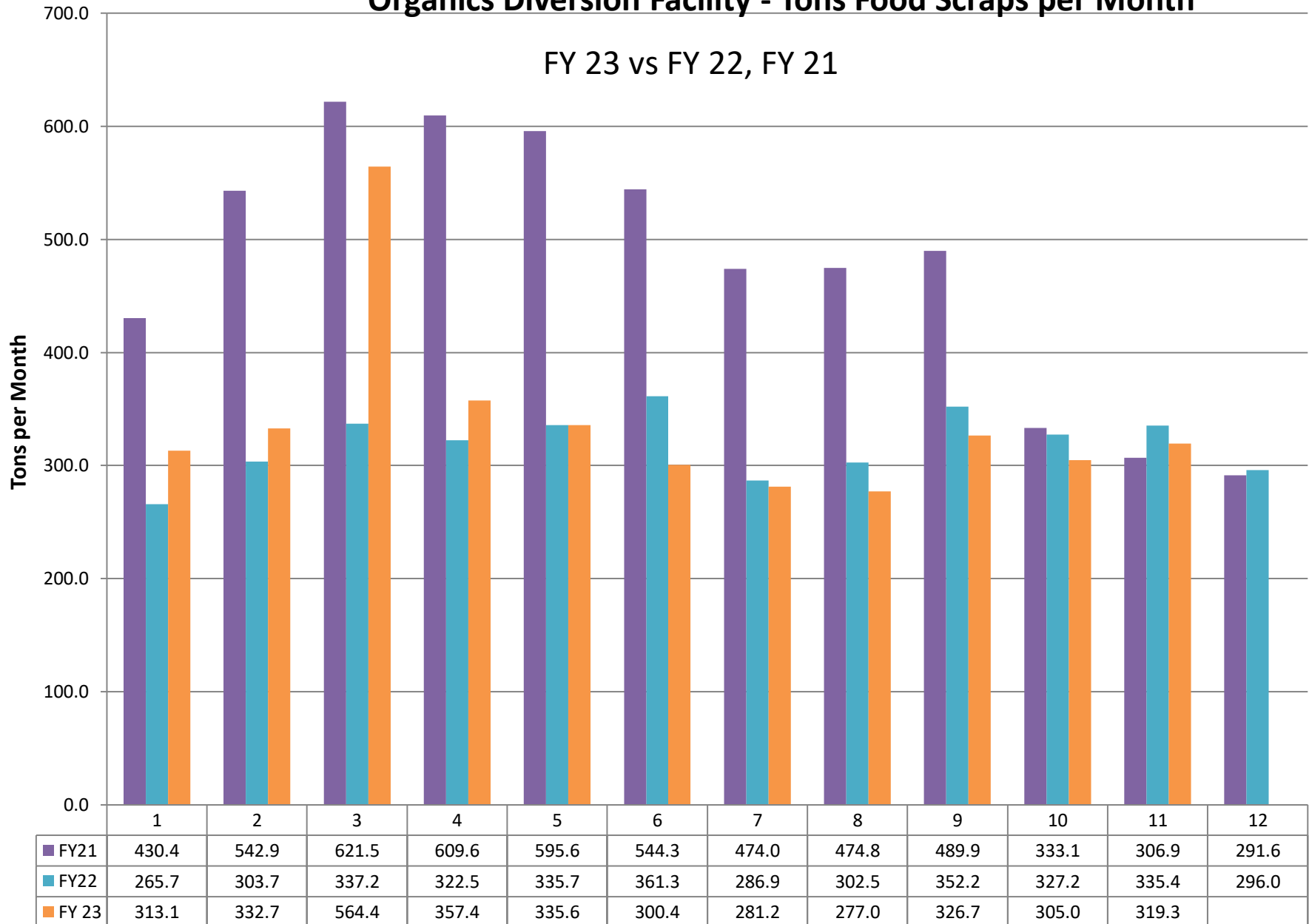


CSWD - SWMF Tons Trash per Month - FY 23 v. FY 22



Organics Diversion Facility - Tons Food Scraps per Month

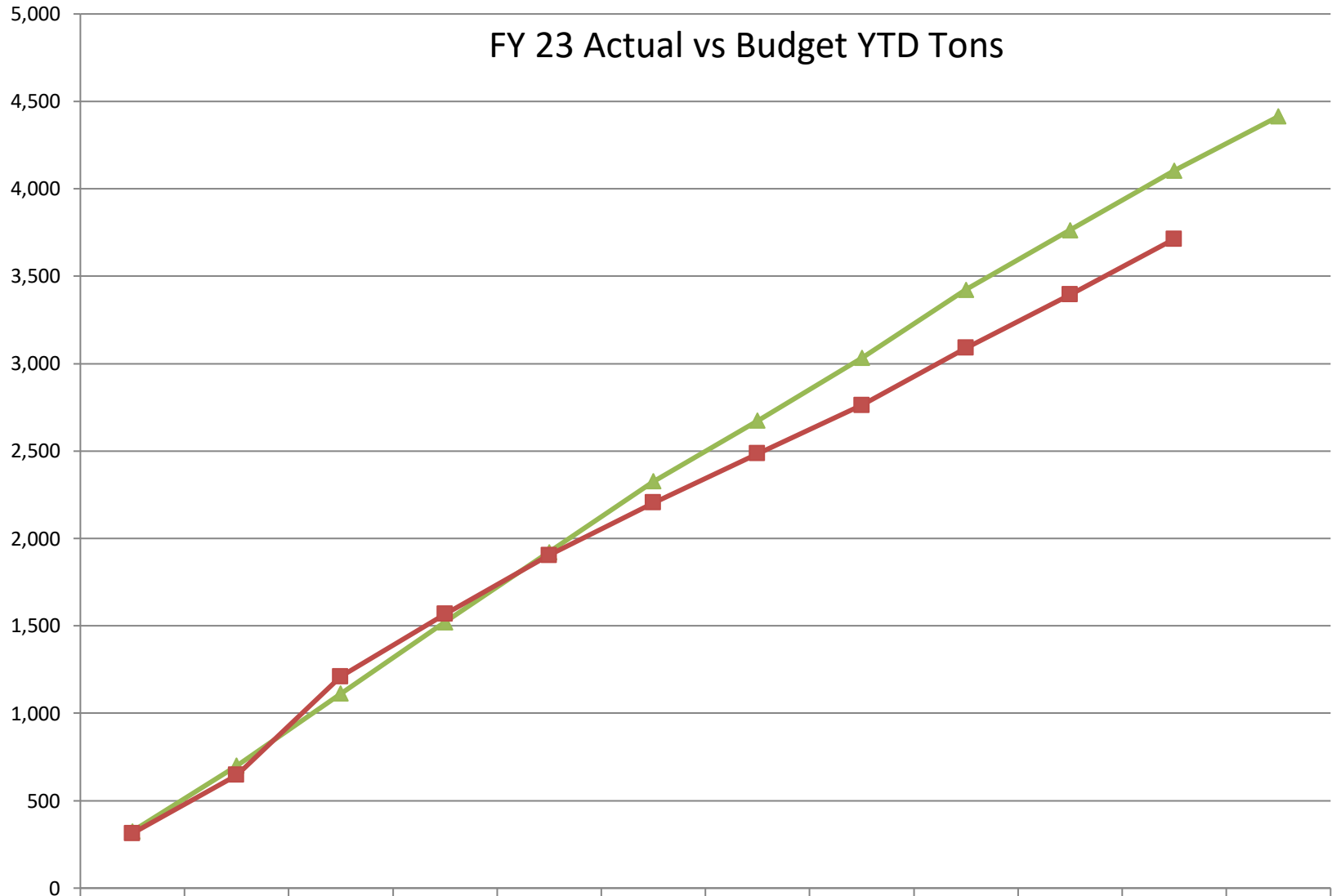
FY 23 vs FY 22, FY 21



Organics Diversion Facility - Incoming Food Scraps

FY 23 Actual vs Budget YTD Tons

Cumulative Year-to-Date Tons



▲ FY 23 Budget	325	700	1,112	1,521	1,922	2,327	2,674	3,032	3,423	3,764	4,104	4,414
■ FY 23	313	646	1,210	1,568	1,903	2,204	2,485	2,762	3,088	3,393	3,713	

WAIT

**Before you open that bottle of water or other beverage,
take a look at what is really happening!**

1,000
people open a
bottle of water
every second
of the day in
the U.S.

A water bottle
25% full
is the amount of
oil it takes
to produce
the bottle.

The
average
person uses
156
plastic bottles
per year.

60 million
plastic water
bottles are discarded
every day
in America.

40,000
18-wheeled trucks
are used
every week
to deliver bottled
water across
the U.S.

It can take
300 years
for a plastic bottle to
fragment, and it still
never
disappears.

91%
of the world's
plastic bottles are
NOT
recycled.

25 million
TONS
of plastic packaging
ends up in our
oceans every
year.

By **2030** we will be pouring the equivalent of **two garbage trucks of plastic** into the ocean **every minute**, and **four per minute** if the planet reaches **2050**.

We can do something to change this!

The main solution to water bottle pollution is to reduce our use of plastic, which means:

1. Changing our everyday habits by using reusable stainless steel water bottles and filling stations.
2. Help raise awareness, by telling friends and family about the impact plastic bottles are having.
3. Make sure you recycle. Whether you use one, or see one on the ground, pick it up and recycle it.



Supplemental Environmental Project (SEP) Proposal Re: 20-CV-00961

With funding and support from CSWD, Green Up Vermont was excited to facilitate.

Reducing Plastic Waste Using Refillable Water Bottle Stations

Project Start November 2021

FINAL REPORT JUNE 16, 2023

"THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT"

~ Robert Swan, Explorer

PROJECT SYNOPSIS FOR SUPPLEMENTAL ENVIRONMENTAL PROJECT (SEP) 20-CV-00961

CSWD funded a grant program to supply and install refillable water bottle stations in schools, municipal buildings, and municipal parks in Vermont. This project was an Environmental Education and Awareness project and a Pollution Prevention project. CSWD is recommended that Green Up Vermont (GUV) manage the project.

GEOGRAPHIC AREA

Outreach and applications received were statewide with at least one installation in each of Vermont's 14 counties. The funding was not enough to ensure each city and town and every municipal park received a station, so care was exercised to ensure fair geographic distribution. Municipal facilities, schools, and rec departments, that have a high amount of public use were given priority to optimize the waste reduction goal. See map. Red dots = placements.

PROJECT DESCRIPTION

The goal of the project was to support waste reduction by providing increased access to refillable water stations and reduce reliance on single-use beverage containers. Eligible recipients were schools, municipal buildings, and parks. Because installation costs are often a barrier to implementation, awardees were reimbursed up to \$1,000 towards the cost of installation. Remaining funds from installation and other items went toward funding other refillable water stations. Recipients covered any installation costs above the \$1000 grant reimbursement as well as any continued costs associated with maintenance of the units.

PROJECT TIMELINE:

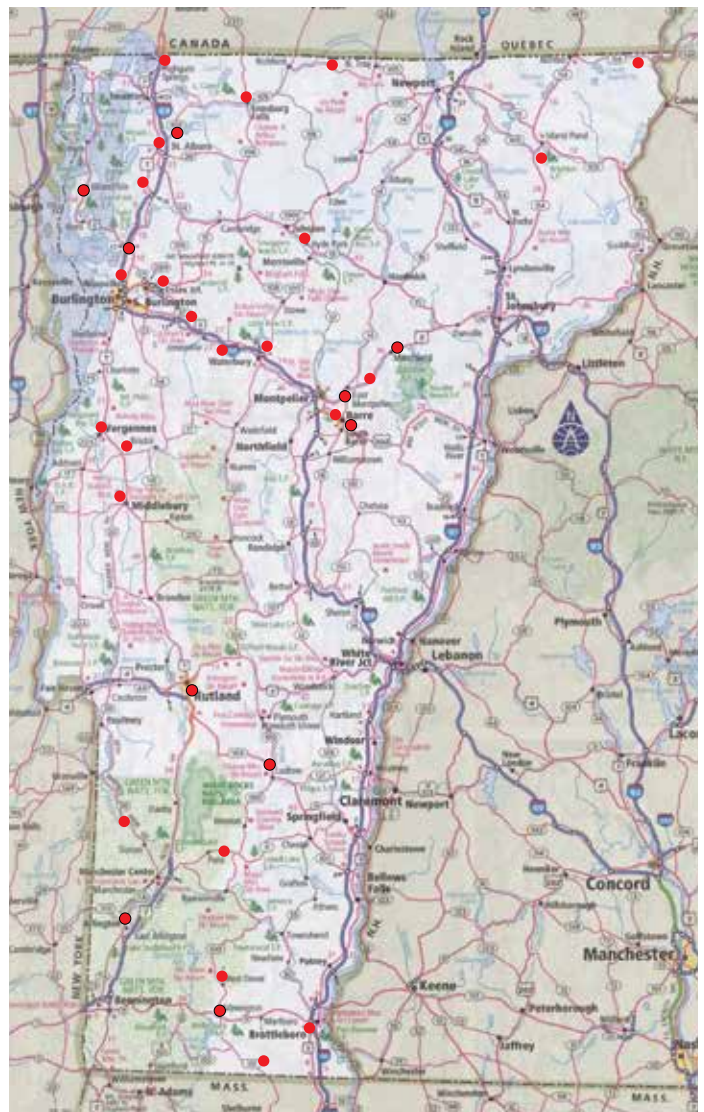
Develop grant app and publicize to potential recipients	Oct. 29, 2021
Notify recipients of the award	Dec. 31, 2021
Order units for drop-ship to recipients	Jan 5, 2022
Pre-Installation waste sort	March 2022
Installation of units	April-June 2022
Reimburse installation costs (up to allowable amount)	April, 2022
Reissue RFP, if allotted units not claimed	May 2022
Repeat process if necessary	May - Aug. 30, 2022
Post-Installation data collection	March 2023

PROJECT BUDGET

20 Indoor Unit: Elkay LZWSSM EZH2O + Filter @ \$823.28 ea.	\$16,465.60
Installation Services Up to \$1,000 per unit x 20	\$20,000
10 Outdoor Unit: Global Industrial Outdoor @ \$1,576.00 ea.	\$15,760
Installation Services Up to \$1,000 per unit x10	\$10,000
Project Management and Admin - Green Up Vermont	\$17,609
Total	\$79,834.60

PROJECT BENEFITS

Single-use plastic bottle reduction was achieved by providing convenient access to refillable water stations throughout Vermont. Access to water in spaces where groups congregate will encourage a broader use of reusable bottles. The project was quantified by conducting pre-installation waste sorts at installation locations, and by collecting post-install data.





PROJECT FACILITATION

November 1 2021, Green Up Vermont received the SEP funding check from CSWD and got right to work implementing the project. Statistics show that waste reduction leads to litter reduction so this project was really a wonderful supplement to the work that Green Up Vermont is passionate about.

After a bit of shopping around for suppliers and sharing the details of the project, we found by purchasing all units at the same time we could receive a "bulk" discount and free shipping (to one location). Our initial instruction was to purchase 20 indoor units and 10 outdoor units with the allotted funds, keeping in mind the installation commitment funds. By buying bulk and receiving free shipping we were able to increase our purchase to 23 indoor units and award, with installation, a total of 33 filling station units - three more than originally scheduled.

Our outreach consisted of multiple lists of eligible recipients including all Vermont schools, town offices, and Green Up Day volunteer town coordinators, many whom are involved directly with rec departments, libraries, and municipal infrastructure. Recipients of the information were excited and before long we were receiving plenty of applications - most worthy of awards. We chose to award units based on the number of people the location would serve, the need for a water resource, along with the type of facility. We were pleased with our response and awarded all units in the first round.

The units were ordered in December of 2021 and delivered to each recipient by March, 2022. With covid still very much a part of our lives many locations had trouble finding plumbers and electricians to do the installs and of course the outdoor units needed warmer weather and unfrozen ground. The installation process was slow but receipts trickled in and Green Up Vermont reimbursed promptly.

Pre-sort data collected showed us we could potentially eliminate approx. 5,686 single use plastics and 4,517 refundable containers from the recycle bin or the landfill on a monthly basis. Annually those numbers equal 68,232 and 54,208 containers respectively.



Left Top: Kate and Steve at Casella, who kindly stored the units, pack up a truckload of units for delivery.

Bottom Left: State map with red pins where units are located.

Top Right: Snow still on the ground in March but this is where the Town of Orange outdoor unit will be installed.

Middle: Alice Ward Library in Canaan, excited to receive their unit.

Bottom Right: Water fountains at the Waterbury Ice Center had been broken for years leaving athletes with only the bathroom sinks to fill waterbottles. This unit was well received and much appreciated. Kate Alberghini with manager Tim Griffith.

AWARENESS & SUSTAINABILITY

As part of our continued education around Green Up Day we began implementing our awareness program that brought publicity to the water bottle project. We shared single-use plastic statistics and spoke to classrooms about how using reusable containers makes a huge difference in the environment. We empowered kids to be influencers in their classrooms, schools, homes, and beyond. The goal for reaching Vermont's youth is to change their habits now for a better future practices.

As units were installed we worked with location project leads to host "ribbon cuttings" in their communities for the press and public awareness. The libraries we worked with held special readings and promoted books that tell additional stories of waste and solution to audiences of all ages. Green Up Vermont designed and implemented a plaque for each unit that promotes using refillable bottles to save the planet and the Green Up Vermont and ANR logos for further connection to Green Up Day and environmental awareness. It includes the Green Up Vermont URL for further information and was funded by Green Up special projects.

"Once a week, a mom and her 2 kids take a walk on the rail trail, and then they come in to the Library to fill their water bottles and read until the Library closes! So SWEET!!!!"

~ Amy Olsen, Library Director, Lanpher Memorial Library



Above: Lanpher Memorial Library unit ribbon cutting. L to R: Jen Holliday, Amy Olson, Kate Alberghini, John Beling, Hyde Park Selectman, and Mike Casella.

Below: Crossett Brook Middle School Unit with Volunteer Town Coordinator Audrey Quackenbush, students and Kate Alberghini.

Right: Outdoor unit at Northwood Pool in Rutland serves 100 swimmers daily during Summer months.



UNIT LOCATIONS

Alice M Ward Library
Arlington Rec Park
Barre Town Rec Area
Brook Memorial Library
City of Barre
City of Vergennes
Crossett Brook Middle School
Donaldson Park
Dorsey Park
Enosburg Elementary School
Fairbanks Museum
Flood Brook School
Georgia Public Library
Green Mountain Union HS
Halifax Town Office
Highgate Library & Community Ctr.
Ice Center of Washington West
Island Pond Welcome Center
Jay-Westfield Elementary School
Lanpher Memorial Library
Marshfield Rec Fields
Middlebury Memorial Sports Center
New Haven Town
Northwood Pool
Petee Memorial Library
Plainfield Co-op
Sand Hill Pool
St. Albans Bay Park
St. Albans City Pool
Town of Orange
Wilmington Visitors Center
Wells Village School
Winooski Community Service Dept.





IMPACT

The initial applications asked each recipient how many people access their location on a daily, monthly, or annual basis. We calculated that there is a potential to reach 1,129,543 +/- each year. The units host a powerful ongoing message.

The units deliver clean drinking water to Vermont residents and visitors of all ages. From student access throughout the day to after school athletics and activities; support for municipal staff, the hospitality of offering a free fill of water to visitors to our state or spectators at our many rec fields. All units save single use plastics from our landfill AND teach the valuable lesson of a simple habit that can make such a huge impact on our planet.

SINCERE GRATITUDE

Green Up Vermont is sincerely grateful for the opportunity to facilitate this project. Water consumption is so important to humans of all ages. Being able to implement this program that not only reduces single-use plastics but provides good clean drinking water is a complete win win.

Working with Chittenden Solid Waste District on this project was a pleasure and their support was consistent and ongoing whenever we needed them.

It is with pride for Vermont and all agencies involved with this program that I report on the success of this initiative. I know the impact will last long into the future with every bottle that these units fill. Our recipients and constituents are all as dually grateful for what we were able to accomplish.

If there is ever another opportunity to conduct a similar grant in the future, please keep Green Up Vermont in mind for the facilitation.

Thank you

Kate Alberghini, *Executive Director, Green Up Vermont*

Above: Patty, Town Clerk in Halifax is thrilled to fill her bottle on site with filtered water.

Middle: Wells Village School, Girls on the Run program athletes and coach.

Bottom Left: Southern Vermont Visitors Center and Chamber of Commerce is pleased to offer free water fills to visitors and residents alike.

Bottom Right: Kate speaks to a Davis School classroom about using refillable containers and how their habits can make a huge environmental impact. They were thrilled with their new water bottles.

