

Chittenden Solid Waste District



#### Chittenden Solid Waste District 1021 Redmond Road Williston, VT 05495

Phone: (802) 872-8100 Fax: (802) 878-5787 www.cswd.net



facebook.com/cswdvt



instagram.com/cswdvt



twitter.com/cswdvt



youtube.com/cswdvt

This Annual Report is available at www.cswd.net.

#### **< FRONT COVER**

Anticipating the final phase-in of Act 148, CSWD expanded composting operations into roughly eight acres of pre-excavated sand quarry. The project involved regrading and installing robust stormwater, runoff management, and erosion control features as well as power and data infrastructure and was possible in part thanks to a matching grant from the VT Agency of Natural Resources.

#### **<<** BACK COVER

Steam from billions of micro-organisms doing their thing billows around equipment transferring 10,000 cubic yards of compost into the new curing field.

#### INSIDE COVER >

Staff at CSWD's Organics Diversion Facility pick trash—mostly plastic from bags, cups, lids, clamshells and other non-compostable products--from the long, deep piles of Green Mountain Compost known as windrows before it undergoes more turning and mixing.



## fy 2021 annual report

#### **TABLE OF CONTENTS**

board chair and executive	
director's message	2/3
board of commissioners	4/5
organizational chart	4/5
who we are	6
MISSION & VISION	6
HOW WE'RE FUNDED	6
what we do	7
REDUCE WASTE	7
MANAGE MATERIALS	7
SUPPORT OUR MEMBERS	7
HINESBURG DROP-OFF CENTER	8
how we're doing	9
MATERIALS RECOVERY FACILITY	10
DROP-OFF CENTERS	11
ORGANICS DIVERSION FACILITY(HOME OF GREEN MOUNTAIN COMPOST)	12
ENVIRONMENTAL DEPOT	13
COMPLIANCE	14
OUTREACH & ENGAGEMENT	15
financial reports	16
BALANCE SHEET	16

## a message from cswd's board chair and executive director

Though we were all ready for relief from the COVID-19 pandemic when CSWD's fiscal year 2021 began on 7/1/20, we knew there was a long way to go before we'd see the end of this tunnel. Plus, that tunnel would likely open into a new reality that required adaptation and innovation.

The good news is that the team at CSWD has become very good at adapting and innovating our operations by building on what we learn during difficult times and never accepting, "because that's how we've always done it" as an answer to any question.

When July 1, 2020 rolled around, CSWD was perfectly poised and ready to handle the final phase of Act 148, a.ka. the Universal Recycling Law. Passed unanimously by the Vermont legislature in 2012, Act 148 mandated recycling across all of Vermont (required in Chittenden County since 1993) and phased in food scrap disposal requirements that feed our neighbors and local soils while mitigating the need for Vermont's one and only landfill.

When the last phase of those requirements kicked in requiring all Vermonters to find better options for managing their wasted food and scraps, we were already expanding CSWD's Organics Diversion Facility (home of Green Mountain Compost products), thanks in part to a \$500,000 matching grant from the Vermont Agency of Natural Resources - Department of Environmental Conservation. The \$1.35 million total investment enabled us to realize significant improvements in operational efficiency, staff and customer safety and convenience, and reductions in fossil fuel use and greenhouse gas emissions, all while ensuring we were well prepared for the growth of incoming food scraps in FY21 and well beyond.

Meanwhile, CSWD's Outreach and Communications teams continued educating the public about food scraps options and our Drop-Off Centers carried on accepting them as we have been for nearly two decades.

This adaptation and continuation of our best practices, anticipating future needs, and tweaking operations for efficiencies reflects a commitment to constant improvement that will be front and center as we look ahead to FY22. We outline here a few significant events from FY21.

#### **SAFETY AS A PRIORITY**

The most important lesson we learned as we adapted to COVID conditions is that except for our Williston location, our Drop-Off Center (DOC) operations had grown beyond each site's capacity. Consequently, when we reopened each site after brief COVID-induced closures, we focused on providing the most needed services safely (first and foremost), efficiently, and cost effectively.

With these goals top of mind, DOC operational adjustments included limiting open days until we could confidently provide adequate staffing, and adjusting materials flows to reduce site congestion and backups onto busy roads, all while balancing access to services for customers at the far reaches of our District. We concentrated less frequently generated, space-intensive, more difficult to handle materials at the sites that can accommodate them and limited trailer traffic to only the facilities that have adequate maneuvering space and queuing capacity. Similarly, we created dedicated residential food scrap drop-off lanes at our Williston DOC when we discontinued collection at the Organics Diversion Facility. This resulted in significantly less congestion at both sites.

By September 2021, all CSWD Drop-Off Centers were open. We reopened the Burlington location as a food scraps-only site in light of State solid waste rules, a clear need for self-hauled food scraps options, and known difficulties safely managing nearly 40,000 annual visits on a footprint intended to handle a quarter of that traffic.

## INCREASED EFFICIENCY AND IMPROVED MATERIALS MANAGEMENT

#### **Organics Diversion Facility**

FY21 sales of compost at CSWD's Organics Diversion Facility (ODF) exceeded expectations by 52.5% over budget. The reconfiguration of the site and purchase of a new windrow turner enabled the composting team to decommission four pieces of heavy equipment and realize a 95% reduction in labor to turn the piles from two weeks to under three hours.

Full implementation of the statewide ban on disposing of food scraps in the trash brought significant increases in residential food scraps and new hauling businesses serving the residential niche. On the downside, we also saw an overwhelming increase in non-compostable trash, prompting us to announce that beginning January 1, 2022, we would no longer accept compostable foodware with food scraps.

#### **Environmental Depot Hazardous Waste Facility**

CSWD's hazardous waste facility in South Burlington, the Environmental Depot, reopened after a brief precautionary shutdown with a new appointment-only drop-off system. This resulted in significantly fewer trips in FY21 when compared with the highest recorded year (FY18), yet we received the third-highest amount of material ever—a 20% increase in pounds per trip over FY18. This ensured more time for our hazardous waste team to plan for safe hazardous waste handling and to recover between customers while also reducing potential emissions and wait time for customers.

#### **Materials Recovery Facility**

CSWD's aging Materials Recovery Facility (MRF) in Williston processed 48,157 tons of material in FY21, nearly double what it was designed to process when it opened in 1993. Staff resumed the pursuit of a replacement facility with a Conceptual Review presentation to our Board of Commissioners in June. By that time, commodity markets had rebounded dramatically, with the MRF realizing a 115% increase in revenue from commodities sales over FY20.

#### **Settlement Reached**

In December 2020, we reached a settlement with the Vermont Attorney General's office regarding a Notice of Alleged Violation from the Vermont Agency of Natural Resources stemming from CSWD's use of processed glass aggregate produced from our Materials Recovery Facility between 2013 and 2018.

#### **FINANCIALS REMAIN STABLE**

Fiscal Year 21 was budgeted through the lens of uncertainty due to the inability to predict or forecast the ways in which revenues may or may not be affected by the Covid pandemic. CSWD's Board of Commissioners requested and approved a highly conservative budget anticipating revenue significantly less than Fiscal Year 20 because of a projected decrease in waste generation. Actual revenue approached pre-pandemic levels, resulting in an out-sized revenue performance for Fiscal Year 21, enhanced even further by expenditures restricted throughout the FY21 budget.

The District's total operating expenses were \$11,993,851 million while operating revenues were \$14,345,775 million for a net surplus of \$3,114,025.

Trash generated in Chittenden County was down 3.9%, from 2.95 pounds per capita per day in FY20 to 2.78 pounds per capita per day. The State disposal goal is no more than 2.73 pounds per capita per day by 2024.

We continue to be grateful for the professionalism and excellence of the CSWD staff, and for the support and commitment to waste prevention, reduction, and responsible management shown by our citizens and businesses as we work together toward a "new normal".



Bryn Oakleaf
Chair, Board of Commissioners



Szul Leurs Sarah Reeves Executive Director

## board of commissioners

We are governed by a Board of Commissioners. Each member town or city appoints a volunteer Commissioner and Alternate to the Board. Commissioners as of July 1, 2020.

#### **EXECUTIVE BOARD**

Bryn Oakleaf (Chair)

Alan Nye (Vice Chair)

Leslie Nulty (Treasurer)

Logan Hegg

Lee Perry

#### **BOLTON**

Rep: Duncan Galbraith Alt: Vacant

#### **BURLINGTON**

Rep: Lee Perry Alt: Jennifer Green

#### CHARLOTTE

Rep: Ken Spencer Alt: Abby Foulk

#### **COLCHESTER**

Rep: Liz Hamlin Volz Alt: Geoffrey Urbanik

#### **ESSEX**

Rep: Alan Nye Alt: Patrick Murray

#### **ESSEX JUNCTION**

Rep: Alan Nye Alt: Amber Thibeault

#### **HINESBURG**

Rep: Doug Taff Alt: Vacant

#### **HUNTINGTON**

Rep: Roman Livak Alt: Landel Cochran

#### **JERICHO**

Rep: Leslie Nulty Alt: Bert Lindholm

#### **MILTON**

Rep: John Gifford Alt: Vacant

#### **RICHMOND**

Rep: Logan Hegg Alt: Caleb Manna

#### ST. GEORGE

Rep: Harry Bowen Alt: Sarah Tischler

#### **SHELBURNE**

Rep: Timothy Loucks Alt: Lee Krohn

#### SOUTH **BURLINGTON**

Rep: Paul Stabler Alt: Vacant

#### **UNDERHILL**

**Rep: Paul Ruess** Alt: Dan Steinbauer

#### **WESTFORD**

Rep: Katie Frederick Alt: Vacant

#### WILLISTON

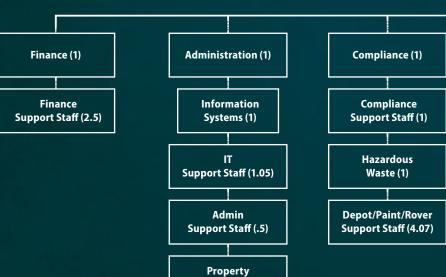
Rep: Jeremy Hulsey Alt: Caylin McCamp

#### WINOOSKI

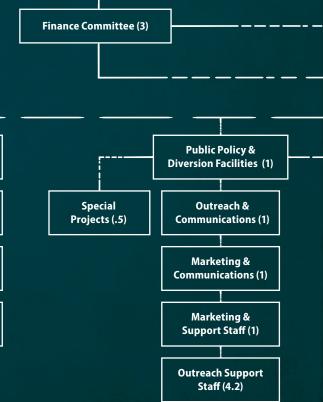
Rep: Bryn Oakleaf Alt: Vacant

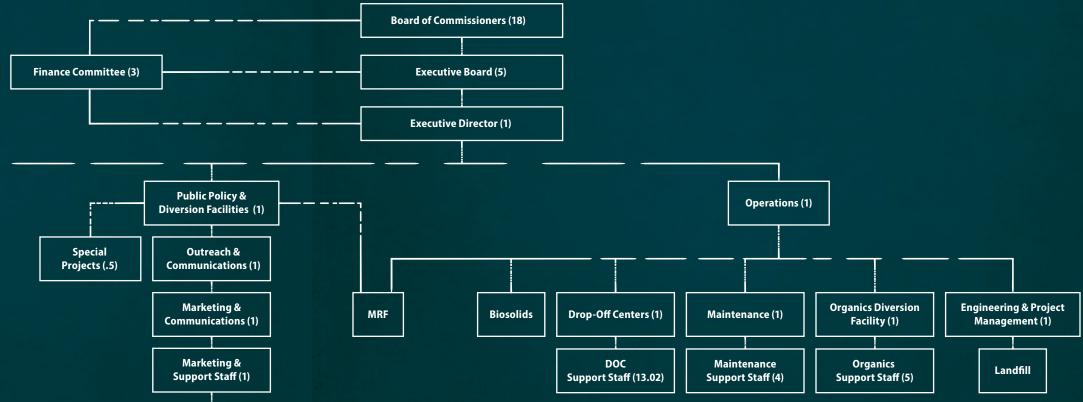
5

## organization



Management





4

### who we are

We are a municipal district created in 1987 to oversee and manage solid waste in Chittenden County.

CSWD serves about a quarter of the population of Vermont (169,681 residents and 7,333 businesses)\* with facilities, programs, and expertise developed over our 34-year history.

\*2020 data. Sources: U.S Census and VT Dept. Of Labor

#### **OUR MISSION**

The Chittenden Solid Waste District's mission is to reduce and manage the solid waste generated within Chittenden County in an environmentally sound, efficient, effective and economical manner.

#### **OUR VISION**

Products are designed to be reused or recycled and our community fully participates in minimizing disposal and maximizing reuse and recycling.

169,681
residents
7,333
businesses

2020 data. Sources: U.S. Census and
VT Dept. of Labor

#### **HOW WE'RE FUNDED**

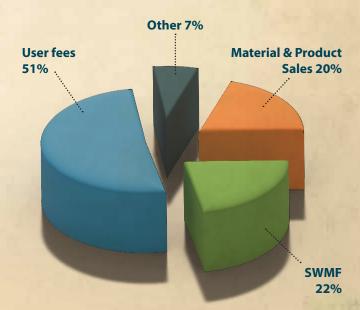
Our revenue comes from three primary sources:

- > User fees on incoming material at our facilities;
- > The Solid Waste Management Fee (SWMF), a per-ton fee on material sent to the landfill;
- Material and product sales from items that we collect, sort, or produce for sale at our facilities;
- A small, variable percentage of our funding comes from State grants for hazardous waste and other materials management.

We are not funded by Income, Sales and Property tax dollars.

#### FY21 REVENUE \$15.1M

(unaudited)



**Income, Sales, or Property Taxes 0%** 

#### **REDUCE WASTE**

 Educate residents, businesses, schools, and event leaders on waste prevention and diversion (see data, p. 15)

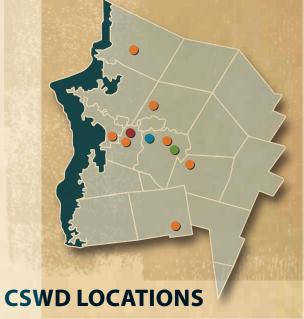
what we do

- > Promote community reuse options
- Process leftover paint from residents and businesses into Local Color Paint
- Maintain and enforce our Ordinance, which includes waste prevention and diversion requirements
- Help our members comply with federal and state solid waste laws
- Provide facilities and tools to help members prevent waste and maximize diversion from the landfill to recycling, composting, and other resource recovery
- **Advocate for state-wide policies** that will reduce waste

#### **MANAGE MATERIALS**

#### Our facilities:

- > The only municipally owned Materials Recovery
  Facility (blue-bin recyclables sorting center) in Vermont
- > Seven regional Drop-Off Centers for household trash, recycling, organics, and special recycling
- A comprehensive hazardous waste program for households and small businesses that includes a permanent year-'round collection facility and a seasonal mobile collection unit
- The state's largest Organics Diversion Facility (home of Green Mountain Compost) turning food scraps and yard trimmings into compost and soil blends supporting local soils



- Drop-Off Centers
- Environmental Depot
- Materials Recovery Facility
- Organics Diversion Facility (Green Mountain Compost)

#### **SUPPORT OUR MEMBERS**

- > Technical expertise and support for waste-related RFPs and studies
- > Grant funding
  - Community Cleanup Fund
  - Waste Reduction Container and Project Grants
- > Subsidized waste-reduction containers
  - Recycling bins
  - **>** Backyard composting bins and digesters
  - Containers for food-scrap drop-off at CSWD facilities
- **> Brokering and investigation** of beneficial use options for biosolids
- **Green Up Vermont donation** on behalf of all member towns; waiver of Green Up Day tire disposal fees



# NOT SANGE FROM TRASH Line (man) A Banding again Line (man) A Banding again Line (man) A Banding again Banding



The brand-new Hinesburg Drop-Off Center opened in July of 2020 featuring new easy-to-identify color-coded icons, a more efficient layout, and trash and recycling compactors that provide safer and easier customer access than previous roll-off containers while reducing truck travel and associated labor, road, and environmental impacts by roughly 50%. This next-generation DOC also boasts a solar panel to help meet the site's electricity needs.

# how we're doing

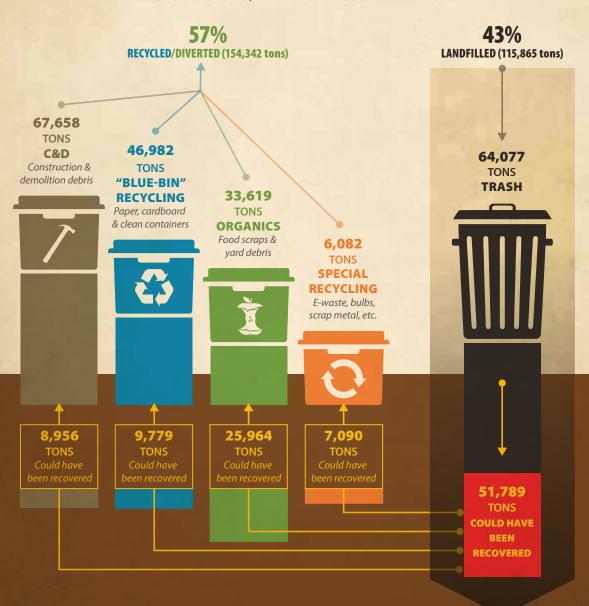
This graphic shows three key measurements of all the materials that individuals and businesses in Chittenden County, VT generated in 2020:

- 1. An estimate of how much "stuff" we all generated and needed to manage as solid waste in 2020.
- 2. Which stream all that stuff went to -- landfill or recovery via recycling or composting.
- 3. How much recoverable material our community chose to send to the landfill instead of keeping it out of the trash by using a currently available program or facility.

Full details are available in the 2020 CSWD Diversion Report.

#### **100% MATERIALS GENERATED (270,207 tons)**

57% RECYCLED/DIVERTED + 43% LANDFILLED



## Materials Recovery Facility

The CSWD Materials Recovery Facility (MRF) processed **48,157** tons of material in FY21, a **4%** increase over FY20 and nearly double what it was designed to process when it opened in 1993.

ST MENT

Ninety-three percent of that material was baled or otherwise processed and marketed for

\$3,362,063 in revenue, a notable 115% increase over FY20.

## Drop-Off Centers

We are grateful for our dedicated staff whose efforts on and off the job allowed us to offer uninterrupted service at our Drop-Off Centers in FY21. By October 2020, most sites had returned to their pre-pandemic days of operation. To address safety issues and improve efficiencies in the DOC system, we modified hours and materials accepted, and limited trailer access to sites in Milton and Williston. The Burlington location reopened accepting food scraps only for two days each week. Drop-Off Center staff served 320,689 customer visits and managed 6,110 tons of trash, 2,565 tons of blue-bin recycling, 1,011 tons of food scraps as well as other limited special recycling and landfill-banned materials.

Roughly 125 tons of mixed "blue-bin" recyclables are deposited for sorting at the CSWD MRF each day. The first step is for a bucket loader to push everything onto a conveyor belt to begin the 30-minute journey to the end of the process. A whopping 70% (by weight) of everything that came to the MRF in FY21 was cardboard and mixed paper—34,715 tons of it, in fact!

Every January, Christmas trees add mounds of greenery to the natural and untreated wood pile at our Williston DOC. All of it will be ground into an essential bulking agent and carbon source for making our premium Green Mountain Compost products.

## Organics Diversion Facility

In FY21 CSWD's Compost Team completed expansion of our compost site to improve the safety and efficiency of food scrap drop-off by commercial customers and leaf and yard trimmings drop-off by landscapers and other businesses as well as residents. A new entrance and dedicated pick-up area serving wholesale and other large-order compost customers greatly improved accessibility, safety, and service. The purchase of a Backhus A55 windrow turner, that replaced four separate pieces of aging equipment, reduced work that previously required two weeks to complete down to a mere three hours resulting in fuel, labor, and emissions reductions!

The team processed

**6,073** tons of food

scraps and **16,000** 

cubic yards of leaves into

compost and other soil |-

• **a**mendments

that were sold for

\$801,845 a

6% increase in

revenue over FY20.

Environmental Depot

CSWD's Environmental Depot in South Burlington rolled out a new appointment system and collected

729,528 pounds of hazardous waste through 8,615 visits made by residents and qualifying

businesses and institutions over  $254.5\,$  days of operation. While total

trips were down from the all-time high in FY18, the total collected

was the third-highest pounds ever. This increase in pounds

per trip pointed to consolidation of trips by Depot customers

and likely better efficiency and less overall emissions as a

result. The Depot team also filtered, treated,

and reblended 62,810 pounds of

discarded latex paint to be sold

as CSWD's Local Color Paint. The

Rover did not operate in FY21 due

to continued COVID-19 concerns and

staffing constraints.

BACKHUS

By straddling each long "loaf" of compost, called a windrow, the Backhus A55 takes just three hours to perform a task that once required two weeks to complete with a excavator. What's more, its purpose-built design enables much more complete and effective blending and aerating. The microorganisms that depend on even oxygenation and carbon:nitrogen blending can then do their composting work far more effectively in all weather conditions.

On average, it takes Robert Holman just 20 seconds to grab, pry open, tip, and thoroughly wrangle a customer's discarded can of latex paint around the custom can scraper. The paint processing team can power through up to 1,200 cans a day during the labor-intensive recovery and triple-screening process. Robert's practiced, expert eye also ensures every can selected for screening meets the high Local Color brand standards.

## Compliance

CSWD's Compliance staff was less active than usual in FY21 due to COVID-19 restrictions but continued with normal licensing and enforcement actions. The team licensed 79 total hauling businesses, with 17 of those now offering food scraps pickup in addition to trash and recycling. Twelve provide food scraps service exclusively. The Compliance team also conducted 27 load-check events, inspecting loads from 15 to 20 vehicles per event. Nine loads were assessed a Banned Materials Fee for including materials banned from the trash in loads destined for the landfill. CSWD investigated, confirmed, and issued a \$1,600 fine for one incident of combined collection of trash and recycling.

## Outreach & Engagement

Despite the challenges COVID presented to our schools, communities, and businesses this past year, our Outreach Team found creative ways to engage with our stakeholders. More than 1,000 community members, students (K-12 and college), and businesses participated in one of our public tours, in-person educational opportunities, and online workshops. We sold more than 500 bins to Chittenden County residents to help them manage their food and solid waste, including 172 Green Cone backyard digesters, 179 Soil Saver backyard compost bins, 136 buckets for bringing food scraps to Drop-Off Centers, and 28 deskside recycling bins.

**CSWD Business Outreach Coordinator Ethan** Every five years CSWD conducts a Waste Hausman displays a worn rubber fiber Composition Study to collect data on what screen disc in front of baled high-density Chittenden County residents are sending polyethylene (HDPE) plastics ready to be to the landfill. During two separate sorts shipped to North American processors for conducted in August and November of remanufacturing. Despite a tour season 2020, contracted workers sorted 30 samples cut in half by COVID restrictions, Ethan and his Outreach colleagues provided more totaling more than three tons of material than 30 COVID-safe tours of the CSWD into 28 categories. The 2020 Waste Composition Study summary is available at Materials Recovery Facility (MRF) for schools, https://cswd.net/forms-publications/. businesses, and the general public. 14

## financial reports

Statement of Net Position	
DRAFT	

DRAFT		
	2021	2020
ASSETS		
Current Assets:		
Cash & Cash Equivalents	\$ 11,230,022	\$ 9,862,869
Investments	54,223	53,412
Receivables (Net of Allowance)	2,088,929	1,900,392
Inventories	471,748	235,738
Prepaid Expenses	235,747	176,453
Total Current Assets	\$ 14,080,669	\$ 12,228,864
Noncurrent Assets:		
Capital Assets:		
Land	5,290,801	5,290,801
Construction in Progress	161,218	90,264
Other Capital Assets Net of Accumulated Depreciation	7,565,499	6,654,584
Total Noncurrent Assets	13,017,518	12,035,649
Total Assets	27,098,187	24,264,513
LIABILITIES		
Current Liabilities:		
Accounts Payable	826,177	1,034,307
Accrued Payroll and Benefits Payable	167,479	43,333
Unearned Revenue	47,623	30,688
Security Deposits Payable	7,350	7,450
Accrued Interest Payable	1,099	1,099
Capital Lease Payable - Current Portion		8,850
Post-Closure Costs Payable - Current Portion	23,123	70,651
Sanctioned Liabilities	79,789	400,393
Other Accrued Expenses	5,868	
Total Current Liabilities	1,158,508	1,596,771
Noncurrent Liabilities:		
Compensated Absenses Payable	382,097	211,340
Capital Leases Payable - Noncurrent Portion		-
Post-Closure Costs Payable - Noncurrent Portion	430,306	443,151
Total Noncurrent Liabilities	812,403	654,491
Total Liabilities	1,970,910	2,251,262
Net Postion:		
Net Investments in Capital Assets	13,687,975	12,026,799
Unrestricted	11,439,302	9,986,452
Total Net Postiion	25,127,276	22,013,251
	VERTICAL	

## financial reports

Statement of Revenue, Expenses and Changes in Net Position DRAFT

Operating Revenues:		
Tipping Fees	\$	7,772,544
Solid Waste Management Fees		3,263,750
Sale of Materials		3,291,721
License Fees		15,917
<u>Miscellaneous</u>	<u> </u>	1,843
Total Operating Revenues		14,345,775
Operating Expenses:		
Materials Recovery Facility		2,582,234
Waste Reduction Program		718,154
Organics Diversion Facility		1,136,323
Drop-Off Centers		2,907,470
Hazardous Waste Program		837,107
Biosolids Program		1,176,806
Special Projects		546,683
Future Project Development		141,801
Finance		442,947
Administration		688,337
Marketing and Communications		89,713
E <mark>nforcement                                   </mark>		130,517
Property Management		61,618
Change in Estimated Future Landfill Post-Closure Costs		(422,176)
Depreciation		956,315
Total Operating Expenses		11,993,851
Operating Income		2,351,924
Non-Operating Revenue/Expenses:		
Rental Income		74,183
Investment Income		16,856
Interest Expense		(23)
Grant Income		661,336
Other Income		
Net Gain (Loss) on Disposal of Assets		9,749
Total Non-Operating Revenue/Expenses		762,101
Change in Net Position		3,114,025
Net Position Beginning of Year		22,013,251
Net Position End of Year		25,127,276

