



AUGUST
2021

Education Advisory Board

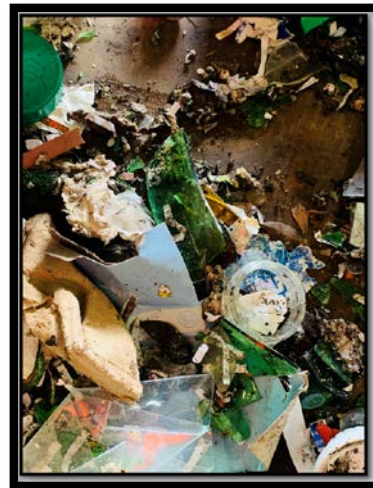
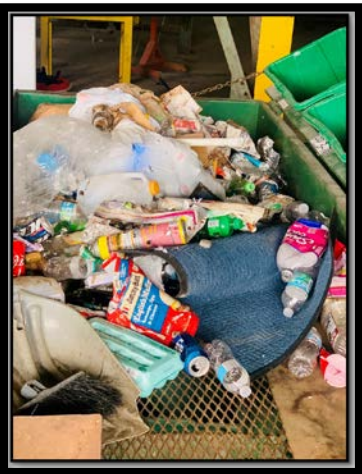
PUBLIC WORKS
Alex Tergis



Before

Single Stream Recycling

- Shattered glass contaminates other recyclables
- Plastic bags
- Greasy pizza boxes
- rugs
- clothing
- organic waste
- plastic bags



Why ?

Recycling Program needs a reset

- Single Stream Recycling has lead to a lack of proper Recycling compliance
- Costs due to Processing, Market Values, and Contamination have made it financially unviable
- Contaminated load has resulted in much of the material ending up in our local landfill



Why?

Remove These Items.

Glass

- Low Value for Years
- Mostly Sand

Mixed Paper and Mixed Plastics

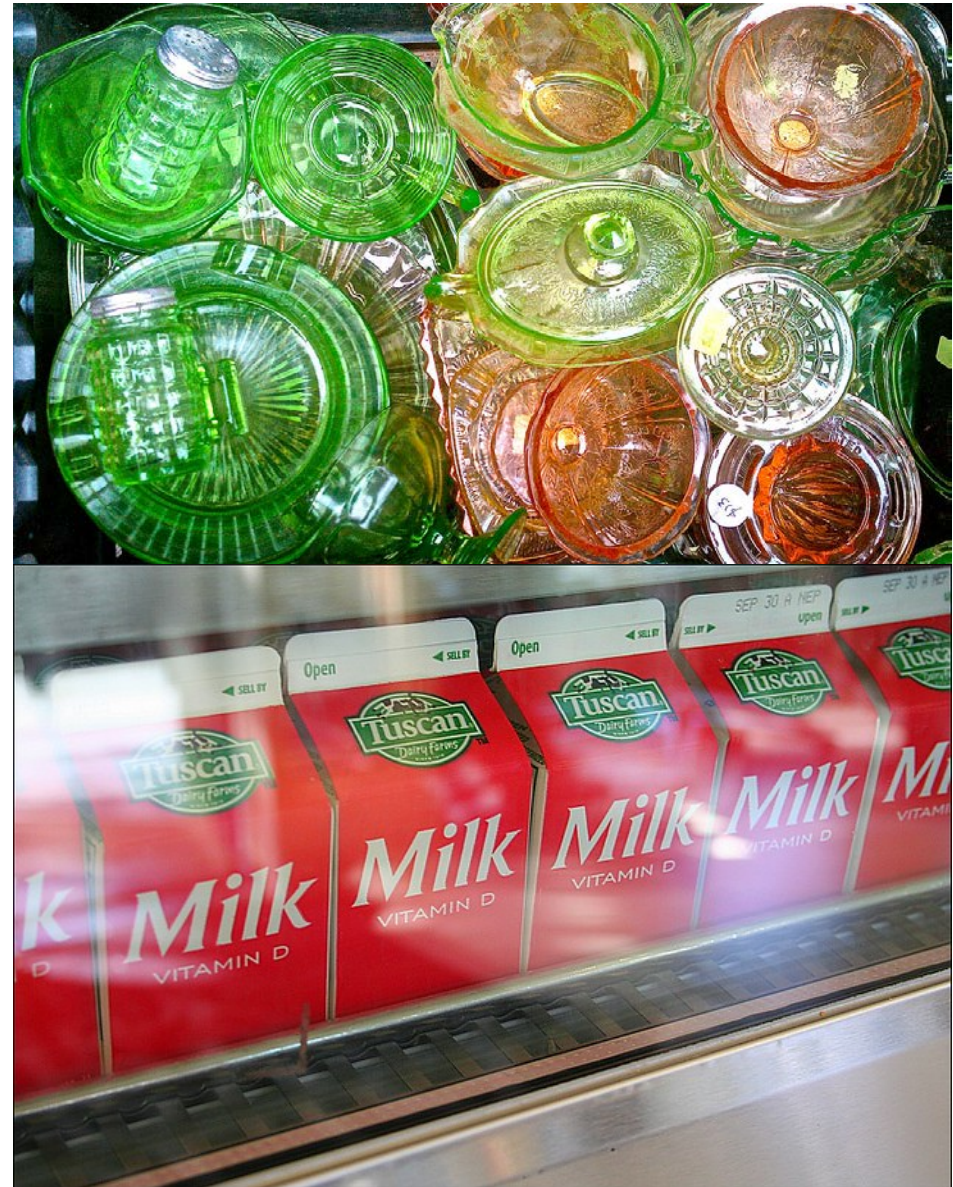
- Last Items Added to Program
- Always Relatively Low Value

Newspaper

- Declining Part of the Stream
- Limited Markets in the Southeast US

Juice/Milk Cartons

- No Value
- Local Market No Longer Available



The Cost of Recycling Wrong



Avg Month				
Material	Single Stream (tons)	% Of Sample	Price/Ton	Value
Plastics #3-7	1.54	0.7%	-\$30.00	-\$46.20
Aspetic- Gable top	1.65	0.8%	\$0.00	\$0.00
Steel-Tin	2.42	1.1%	\$50.00	\$121.00
Aluminum	2.97	1.4%	\$960.00	\$2,851.20
HDPE Natural	3.08	1.4%	\$1,000.00	\$3,080.00
HDPE Colored	3.96	1.8%	\$300.00	\$1,188.00
PET Bottle	14.30	6.5%	\$190.00	\$2,717.00
Mixed Paper	15.62	7.1%	-\$2.50	-\$39.05
OCC	25.08	11.4%	\$30.00	\$752.40
Bagged Trash	22.00	10.0%	-\$55.00	-\$1,210.00
Glass	34.32	15.6%	-\$22.50	-\$772.20
Newspaper	49.06	22.3%	-\$2.50	-\$122.65
Residue	44.00	20.0%	-\$55.00	-\$2,420.00
Processing	220.00		-\$99.00	-\$21,780.00
TOTALS	220.00	100.0%		-\$15,680.50



RECYCLING COMMODITIES PROCESSING COST/VALUE

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- Glass has a long history of negative value. Currently used at Monarch Landfill for drainage and cover.
- Mixed Paper and Mixed Plastic added when markets were strong. Markets weakened by China's change in policy.
- Current Disposal Cost at Wheelabrator \$48.11/ton.
- Wheelabrator Recycling Credit Received = 48%
- Recycling process fee currently over \$100/ Ton

After

Single Stream Recycling Reset

Sending materials to waste to energy (WTE) reduces costs and ensures that waste does not end up in the landfill. Ensure that the recycled material is not contaminated.



What?

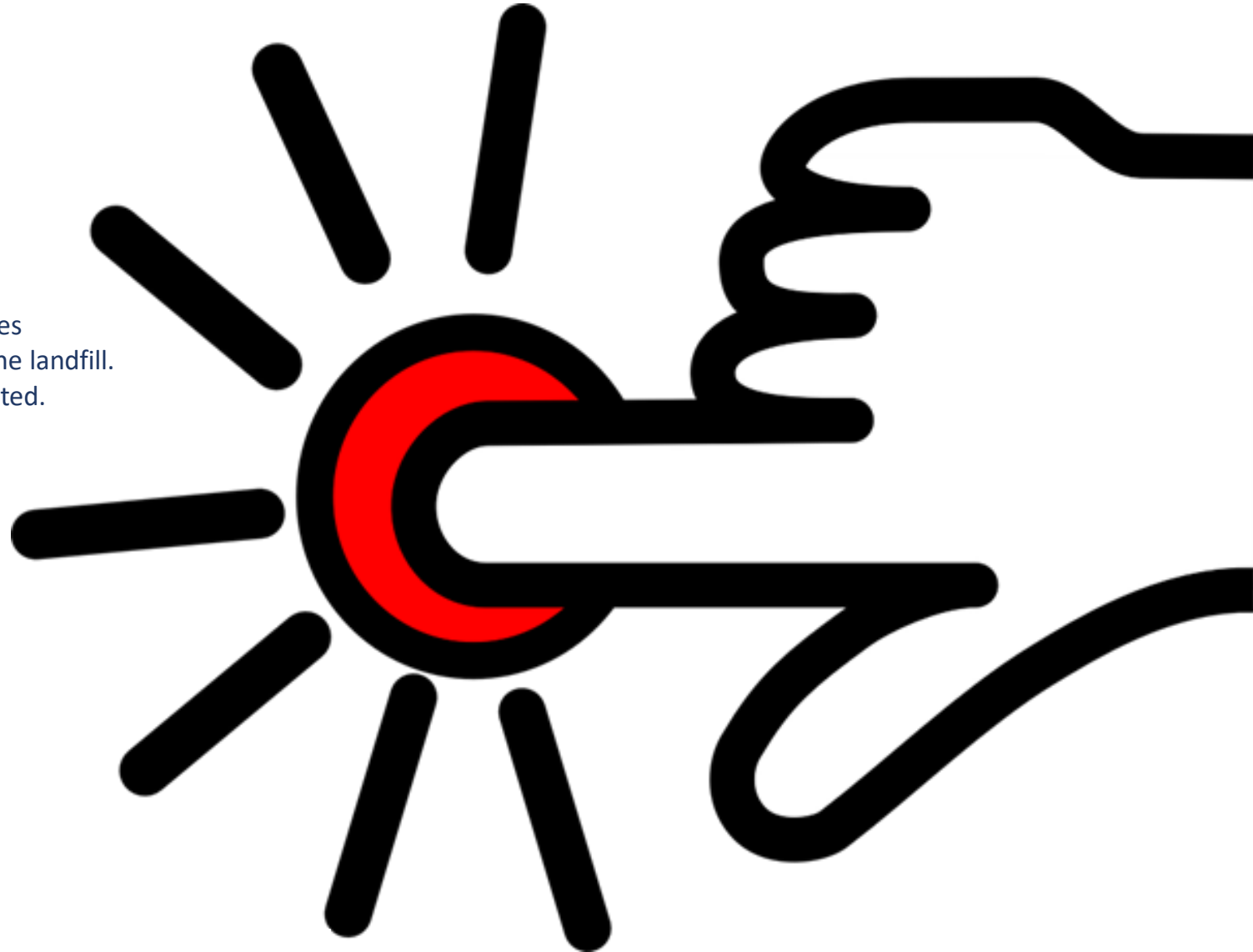
Are We Doing Locally.

- **Are We Doing Locally?**

- Sending all materials to WTE
 - Reduced Cost
 - Ensures no materials end up at Mount Trashmore
 - Sending materials to waste to energy (WTE) reduces costs and ensures that waste does not end up in the landfill. Ensure that the recycled material is not contaminated.
- Drop-Off Ctr
 - Clean Materials = \$ Value \$
 - Proper Recycling

- **Long Term**

- Broward County Solid Waste Working Group
 - Regional SW and Recycling Program
 - First Step:
 - Form of Governance
 - Develop and Build New Program
 - Ultimate changes
 - Dual Stream Recycling?
 - Additional Waste Solutions



DROP-OFF CENTER

- Clean Materials = \$ Value \$
- Retrains residents in proper Recycling
- Ensures the materials get recycled
- Participation (*Residents*)
 - 104 in November 2020 vs.
698 in July 2021



new Coconut Creek **Recycle Right**
CORRUGATED CARDBOARD PLASTIC BOTTLES

Coconut Creek's
**RECYCLING
DROP-OFF CENTER**
THE NEWEST ADDITION TO OUR RECYCLING PROGRAM

Why Drop-Off? Proper recycling has value, reduces our carbon footprint and saves taxpayer dollars.	Who Can Drop-Off? Coconut Creek Residents (Bring Valid ID with Address) AND Coconut Creek Businesses (Bring a Copy of Your Business License / Tax ID)	Days to Drop-Off? The drop-off center is open three days, Friday, Saturday and Sunday from 8:00 AM to 4:00 PM	Where to Drop-Off? Bring your recyclable items behind the Coconut Creek Police Station off NW 22nd Street and Lyons Road
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Corrugated Cardboard
BROKEN DOWN

Empty Aluminum & Steel Cans

Empty Plastic Bottles With Screw Caps
PLASTICS #1 & #2

ALL CONTAINERS MUST BE RINSED, SEPARATED BY TYPE (PLASTIC OR METAL), AND BE FREE OF DEBRIS OR CONTAMINANTS.

COCONUTCREEK.NET/RECYCLE
Or Call: 954-973-6780

Opens November 6th

RECYCLED MATERIAL & QUARTERLY PARTICIPATION

April-May-June		
	Lb.	Ton
Corrugate	16640	8.32
Plastic	4700	2.35
Metal & Aluminum	2720	1.36

April-May-June	
Participants	2009
2 times	86
3 times	3



CORRUGATE

- For the city of coconut Creek recycling 8.32 ton of cardboard save the equivalent of 382.75 gallons of oil, and saves up to 5,824 gallons of water.
- By recycling 8.32 tons of cardboard, the city has avoided the use of 24.9 tons of wood to create virgin cardboard.
- Recycling cardboard is good for the planet, saves trees, conserves energy, and reduces the pollution that is a result of producing new materials.



ALUMINUM & METAL

- Coconut creek recycle 1.36 Ton. of Aluminum & metal for the last 3 months
- There is no limit to the amount of times aluminum can be recycled.
- Recycle 0.75 Ton. Of aluminum can saves enough energy to run 50,000 Televisions for three hours.
- Recycle 0.75 Ton. Of aluminum can saves the equivalent of 25,000 gallons of gasoline. Recycling aluminum saves over 90% of the energy required to produce new aluminum.



PLASTIC

- 2.35 ton of plastic bottles saves the equivalent energy usage of more than four person household for one year.
- 2.35 ton of recycled plastic saves 13,569 Kwh of energy.
- 2.35 ton of recycled plastic saves 38.305 barrels of oil.

HOW IS GARBAGE IN BROWARD COUNTY DISPOSED OF?

Wheelabrator South Broward
Converts Garbage into Energy
Powers 38,510 homes
Reduces Volume by 90%
Recycling Credit of 48%



Landfill
“Mount Trashmore, the landfill that's over 20 stories, will grow bigger and taller





Thank You!

Alex Tergis