



Reducing Contamination of Residential Recycling

Zoe Killian

Environmental Education Specialist | The Woodlands Township

Recycling & Waste Minimization Program Coordinator



The Woodlands, Texas



119,000 Residents

42,500 Total Households

35,500 Homes, **7,000** Apartment Units

Environmental Services Department



Mission Statement:

To empower informed choices for the sustained health of our community and environment.



Residential Waste Services



Weekly pickup of yard waste, recycling and garbage

Yard Trimmings - Unlimited, in compostable bags or reusable containers

Recycling - 96-gallon cart

Garbage - 96-gallon cart, additional bags accepted with purchased pink tags

Bulky Waste & Cardboard - Scheduled, unlimited service

www.thewoodlandtownship-tx.gov/trashandrecycling

Recycling Center

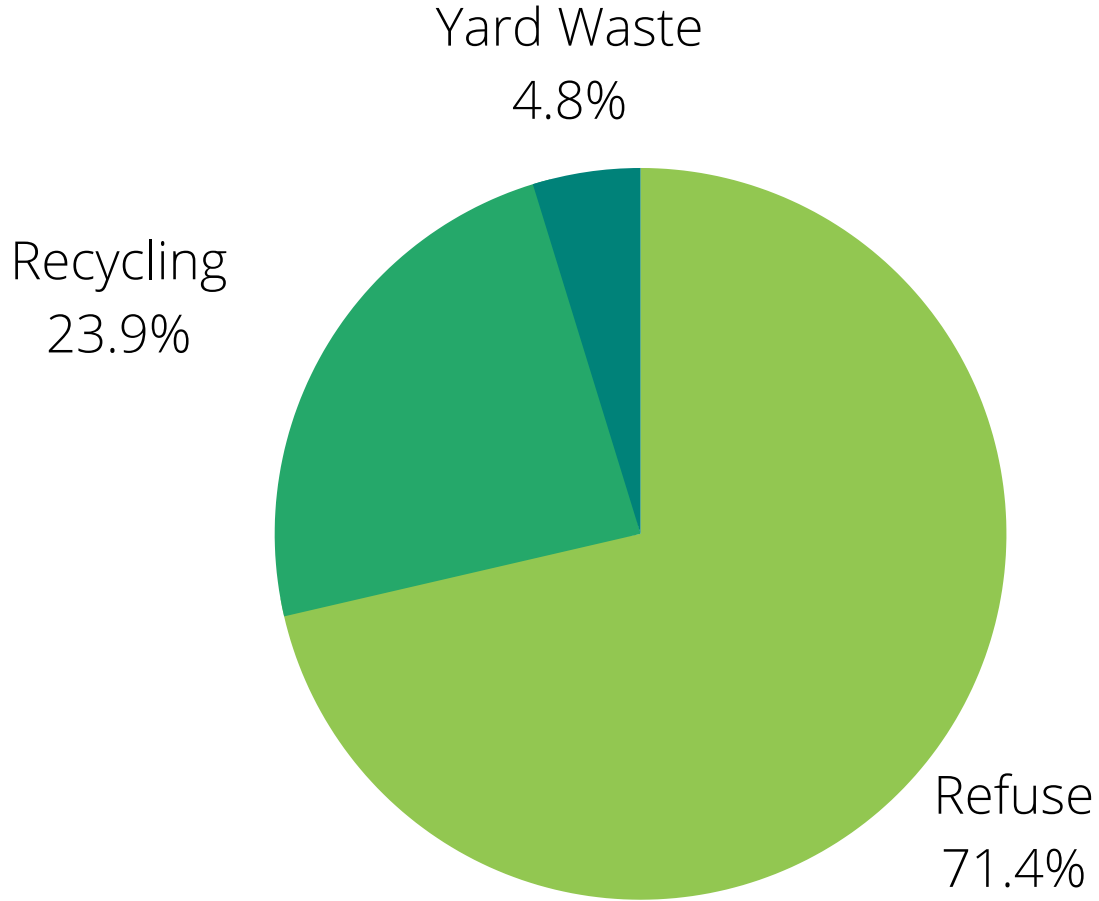
Access for Multi-Family Units

Accepted Items:

Cans	Paper
Cardboard	Plastic Containers
Cartons	#1-5 and 7
Glass	Yard Trimmings



Tonnages & Rates



2020 Totals			
	Refuse	Recycling	Yard Waste
Total Tons	33,326	11,142	2,221
Tons/month	2,777	929	230
lbs/hh/wk	36.2	12.1	3.3



Recycling Program

Participation

87%

All single-family homes receive recycling service per contract

Diversion

29%

Includes yard trimmings, recyclables and textiles**

Contamination

21%

Bagged recyclables and residue

14%

Decrease in contamination between 2019 and 2020

**Figures based on 2020 reports provided by Waste Management.*

***Textile recycling program cancelled November 2020.*

Previous Education Methods



- Social Media
- Blog Posts
- Magazine Articles
- Press Releases
- Outreach Events
- Handouts
- Ads
- **Annual Mailer**

Contamination Monitoring Case Studies

- **Atlanta, GA** initially had a 37% contamination rate. A multi-week cart education program, focused on reducing plastic bag contamination, led to a 27% increase in capture rate and a **57% decrease in contamination** for pilot routes.
- In **Denver, CO** the emphasis was on improving capture rates for a city that was performing relatively well already and focusing cart education around aluminum cans. For households on routes that received cart tags, the aluminum capture rate went up by 25%. Those that didn't saw no noticeable change.
- **Chicago, IL** had a high contamination rate problem and bags were a primary source. An initial pilot program led to a **32% decrease in contamination**.
- In **Clacamas County, OR**, during the first week of cart education, only 37 percent of homes received a 'Nice Job' tag. By the sixth and final week of the study, that number had risen to 54 percent.

A New Strategy

Back to the basics.

Consistent messaging.

Meet people where they are.

Brand recognition.



Program Overview

- **Goals**

- Educate residents about recycling
- Reduce contamination of recyclables
- Reduce net recycling processing fees
- Reduced rejected recycling load fees

- **Method**

- February - April
- Staff follow waste service schedule
- Record number of tags distributed
- Log streets completed in database

- **Staff**

- ~400 Hours to complete
- ~95 average tags per hour
- ~700 tags per day with 2 staff

Recycle Right.

WITH
THE WOODLANDS
TOWNSHIP

CHECK OUT THE TAG
ON YOUR CART TO
LEARN HOW!



Annoucement

- Press Releases
- Social Media
- Email Blasts



THE WOODLANDS TOWNSHIP
The Woodlands, TX

NEWS RELEASE

For media inquiries, contact: Nick Wolda
nwolda@thewoodlandstowship-tx.gov

Township helps residents to Recycle Right with new campaign

THE WOODLANDS, TEXAS (February 5, 2020) – The Woodlands Township has a new education campaign for residents to better understand how to Recycle Right. Between February and April of 2020, Township staff will affix a Recycle Right educational tag to each residential recycling cart. Residents are encouraged to save the tag and refer to it for which items to place in the recycle cart. The campaign is for general education only, as no inspections of cart contents will be made.

“Recent changes in international recycling trade policy have affected market conditions and led to stricter quality standards for recyclable materials. To help meet these standards and keep our residential recycling program strong, The Woodlands Township has set a goal of 25 percent or less contamination in the residential curbside program. Recent contamination rates in The Woodlands have averaged 24 percent, on par with the national average,” says Township Environmental Services Manager John Geiger.

Contamination is considered to be anything in the cart that is not on the accepted recyclables list, which can be found [online](#) on the Township website or on the top of residents’ recycle cart lid. Common contaminants include plastic bags, greasy pizza boxes, Styrofoam, wires and coat hangers. Recyclables that are bundled inside a plastic bag and then placed in the cart are considered contaminants, as well.

Tag Design

- Reinforce basic message
 - Highlight our most common contaminant
- Simple concepts
 - 3 Quick Rules
 - Recycle these items ONLY
 - When in doubt...
- Research based graphics and concepts
 - Research Partnership
- Quality paper and print
 - Perceived value



DO NOT BAG Recyclables

Collecting recyclables in a bag?
Empty the contents into the cart.

Recycle plastic bags at local grocery stores only.

For more information, please visit
www.thewoodlandstownship-tx.gov/recycling
or call 281-210-3800

THE WOODLANDS TOWNSHIP



Recycle Right.

Remember these guidelines:

DO NOT bag recyclables

NO plastic bags

Empty, rinse and replace caps

Recycle these items **ONLY**:

Cans
Aluminum, Tin & Steel

Cartons
Food & Beverage

Paper
Clean Paper, Newspaper, Magazines, Cardboard

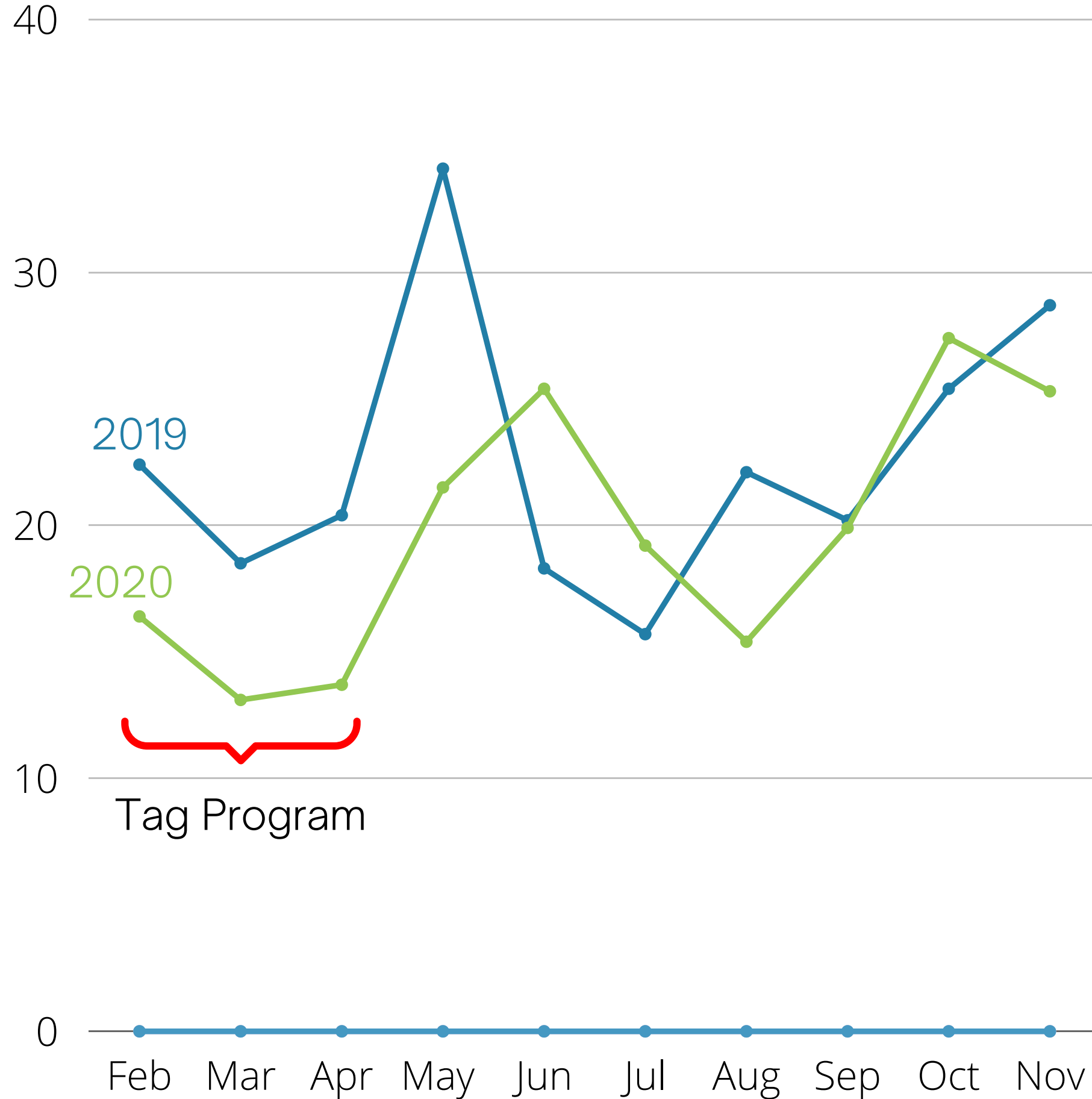
Glass
Bottles and Jars

Plastic
Kitchen, Laundry & Bath Bottles, Tubs & Containers

WHEN IN DOUBT, THROW IT OUT!

*Graphics provided by Recycling Partnership

Contamination Rates



Results

14%

Decrease in average annual contamination between 2019 and 2020

Support for continuation of the program

Increased monitoring of hauler's green tag efforts

Community feedback

Continued Education

THE WOODLANDS RECYCLES RIGHT

GUIDELINES

Recycling
Empty, rinse and do not bag recyclables.

Do not bag recyclables

Trash
When in doubt, throw it out.

RECYCLE RIGHT. FOLLOW THESE RULES:

- Empty, rinse & keep caps on containers
- No food stains on cardboard
- Do not bag recyclables
- No plastic bags

THE WOODLANDS TOWNSHIP

THE WOODLANDS RECYCLES RIGHT

CAN I RECYCLE THIS?

NOT IN YOUR CART

ONLY AT THE STORE

Recycle More At The Store
Clean, dry stretchy plastic bags and film can be taken back to a grocery store to be recycled. Do not put them in your recycling cart.

THE WOODLANDS TOWNSHIP

THE WOODLANDS RECYCLES RIGHT

CAN I RECYCLE THIS?

YES

RECYCLE RIGHT. FOLLOW THESE RULES:

- Empty & rinse containers
- Do not bag recyclables
- No plastic bags

THE WOODLANDS TOWNSHIP

THE WOODLANDS RECYCLES RIGHT

CAN I RECYCLE THIS?

NO

Do not bag recyclables.
Empty the contents into the cart and then throw the bag in the trash. Reuse clean bags or recycle them at a grocery store only.

THE WOODLANDS TOWNSHIP



*Some graphics provided by Recycling Partnership



Future Goals

- Keep contamination below 25%
- Increase awareness
- Audit management

Conclusion

- Cart tagging is an effective tool for fighting contamination
- Simple messaging, consistency and multiple outreach methods are important
- Educational tagging is a foot in the door for cart inspection and additional education

References

- **BEHAVIOR CHANGE FOR NATURE: A Behavioral Science Toolkit for Practitioners**
 - www.rare.org/report/behavior-change-for-nature/
- **Recycling Partnership**
 - Fighting Recycling Contamination | Recycling Resources for Communities (recyclingpartnership.org)

Follow the Environmental Services blog for updates!

www.thewoodlandstownship-tx.gov/environmentblog



Zoe Killian

Environmental Education Specialist | The Woodlands Township

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281-210-3927

zkillian@thewoodlandstownship-tx.gov