

The Dos and Don'ts of **RECYCLING** in Hillsborough County 2018



About the Solid Waste Management Division

Hillsborough County's Solid Waste Management Division oversees waste collection, disposal and recycling within their solid waste management jurisdiction. The completely integrated operation includes collection, transportation, disposal and reporting of all solid waste generated or brought into the system.

Hillsborough County residential solid waste customers receive twice-a-week garbage collection, once-a-week recycling and once-a-week yard waste pickup curbside. Customers also have access to three Household Hazardous Waste collection sites, three yard waste drop-off sites and four Community Collection Centers.

The mission of Hillsborough County government is to provide effective quality service at a reasonable cost with courtesy, integrity and accountability in a manner that protects and enhances the quality of life of our diverse population.



Request a Recycling Presentation

Hillsborough County offers free presentations to schools, businesses, homeowners' associations and community groups on the topics of recycling and waste reduction. Presentations can be tailored to accommodate available meeting times, different age groups and the needs of the target audience. Print and digital copies of educational materials are available at no charge.

To request educational materials or schedule a presentation, contact Nina Stokes, Hillsborough County Recycling and Waste Reduction Specialist, at 813-274-6891 or stokesn@hcflgov.net.

Recycling contacts

Hillsborough County Solid Waste Management Division

HCFLGov.net/recycling
813-272-5680

Plant City Solid Waste Department

plantcitygov.com/64/Solid-Waste
813-757-9208

City of Tampa Department of Solid Waste & Environmental Program Management

tampagov.net/solid-waste
813-348-1146

City of Temple Terrace Public Works Department

templeterrace.com/182/Public-Works
813-506-6570

Educators

Share 100 words about how you used this resource in your classroom for a chance to win a \$15 gift card! Visit tampabay.com/nie for details and to enter.

About NIE

The *Tampa Bay Times* Newspaper in Education program (NIE) is a cooperative effort between schools and the Times Publishing Co. to encourage the use of newspapers in print and electronic form as educational resources—a "living textbook." Our educational resources fall into the category of informational text, a type of nonfiction text. The primary purpose of informational text is to convey information about the natural or social world.

NIE serves educators, students and families by providing schools with class sets of the Pulitzer Prize-winning *Tampa Bay Times* plus award-winning original educational publications, teacher guides, lesson plans, educator workshops and many more resources—all at no cost to schools, teachers or families. In 2017-2018, NIE provided more than 1.5 million



print copies and 10 million digital editions of the *Times* to area classrooms free of charge thanks to our generous subscribers and individual, corporate and foundation sponsors. NIE teaching materials cover a variety of subjects and are aligned to the Florida Standards.

For more information about NIE, visit tampabay.com/nie, call 727-893-8138 or email ordernie@tampabay.com. Follow us on Twitter at [Twitter.com/TBTimesNIE](https://twitter.com/TBTimesNIE).

Newspaper in Education Staff

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Credits

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Florida Standards

This publication and its activities incorporate the following Florida Standards for middle school students.

Science: SC.68.CS-CC.1.1; SC.68.CS-CC.1.2; SC.68.CS-CC.1.3; SC.68.CS-PC.1.4 SC.68.N.1.1; SC.68.N.2.1 **Social Studies:** SS.7.C.2.3; SS.8.E.3.1; SS.8.FL.1.1; SS.8.FL.1.2; SS.8.FL.1.3; SS.8.FL.1.4 **Language Arts:** LAFS.68.L.1.1; LAFS.68.L.1.2; LAFS.68.L.2.3; LAFS.68.L.3.4; LAFS.68.L.3.5; LAFS.68.L.3.6; LAFS.68.RI.1.1; LAFS.68.RI.1.2; LAFS.68.RI.1.3; LAFS.68.RI.2.4; LAFS.68.RI.2.5; LAFS.68.RI.2.6; LAFS.68.RI.3.7; LAFS.68.RI.3.8; LAFS.68.RI.3.9; LAFS.68.SL.1.2; LAFS.68.SL.1.3; LAFS.68.SL.2.4; LAFS.68.SL.2.5; LAFS.68.SL.2.6; LAFS.68.W.1.1; LAFS.68.W.1.2; LAFS.68.W.1.3; LAFS.68.W.2.4; LAFS.68.W.2.5; LAFS.68.W.2.6; LAFS.68.W.3.7; LAFS.68.W.3.8; LAFS.68.W.3.9; LAFS.68.W.4.10



What is recycling?

According to the U.S. Environmental Protection Agency, recycling is “the process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products.”

The three steps of the recycling process are represented by the familiar recycling symbol above.

- 1. Collection and processing:** Recyclable materials are collected, sorted and processed into materials that can be used in manufacturing.
- 2. Manufacturing:** New products are manufactured using materials made from recycled content.
- 3. Purchasing:** Consumers purchase new products made with recycled content.

Source: U.S. Environmental Protection Agency

Why recycle?

Recycling benefits the environment, our community and our economy:

- Reduces the amount of waste sent to landfills and incinerators
- Conserves natural resources such as timber, water and minerals
- Increases economic security by tapping a domestic source of materials
- Prevents pollution by reducing the need to collect new raw materials
- Saves energy
- Reduces greenhouse gas emissions that contribute to climate change
- Helps create jobs in the recycling and manufacturing industries

Source: U.S. Environmental Protection Agency

Watch a video of Hillsborough County's contracted material recovery facility in action at

youtu.be/38lyLUtUSVk.



What is single-stream recycling?

Hillsborough County's recycling program is single-stream. With single-stream recycling, all types of recyclable items accepted in the program can be placed together in one bin. There is no need for the customer to separate the different types of recyclables. Single-stream recycling is easier and more convenient for residents.

The collected recyclables are sorted at a material recovery facility (MRF). At the MRF, materials are sorted by a combination of workers and automated systems, such as magnets, optical scanners and sorting screens.

Once the materials are sorted by material type, they are shipped to domestic or overseas markets or, in some cases, transported to another site for further processing.

Sources: Encyclopaedia Britannica, Green Machine, HowStuffWorks, Tampa Bay Times, Waste Management

Going beyond the text

Waste reduction

Municipal solid waste, more commonly known as trash, consists of everyday items that we use and then throw away. A waste journal serves as a great way to record and analyze what we are throwing away and how it could be minimized. Create a chart or spreadsheet with five columns. In the first column, record the name of each item you dispose of over the next two to three days. In the next three columns, record where the item should go (recycling, food waste or trash). In the final column, record where you actually disposed of the item. When your study period is finished, answer the following questions:

- What were the main components of your waste?
- What steps can you take to reduce your waste?
- What percentage of your waste was composed of recyclables?
- What were some of the items that could have been reused or recycled instead of thrown away?
- Why do you think you didn't recycle those items?
- What steps can you take to increase your recycling rate?

Adapted from: "Student Waste Journal," Recycling Champions Green Team Advocacy Action Kit, GrowNYC



DO RECYCLE



these items in your blue recycling cart



ALWAYS place recyclables loose in your cart, never bagged.
Recyclables should be **CLEAN, DRY** and **FREE OF FOOD** residue.

- Clean and empty **aluminum cans** (no aluminum foil)
- Clean and empty **metal food containers** (no scrap metal)
- Clean and dry **paper** (any paper that tears easily; no shredded paper)
- Clean, dry and flattened **cardboard** (no pizza boxes)
- Clean and dry **paperboard** (such as cereal boxes or paper towel rolls)
- Clean and empty **plastic bottles, jugs and containers** (no plastic bags or plastic wrap)
- Clean and empty milk, juice and broth **cartons**
- Clean and empty **glass bottles and jars**



How to use your blue recycling cart

- Fill your blue cart with **unbagged** recyclables that are clean and empty.
- Everything must fit **inside the cart** in order to be collected.
- Cart must be at the curb **by 6 a.m.** on your collection day.
- Place the cart at curbside with the **arrows on the lid toward the street** and the handle toward your home.
- Keep your cart at least **three feet away** from your gray trash cart, mailboxes, vehicles, trees and any other obstructing objects.

Don't 'wish-cycle' - When in doubt, throw it out!

We all want to protect and conserve resources by recycling. **But attempting to recycle items that can't be recovered in your local curbside recycling program—"wish-cycling"—actually causes more harm than good.**

The largest challenge facing single-stream recycling programs today is contamination. Contamination is when nonrecyclable items or excessively dirty materials are placed into the recycling stream.

For example, when food or liquids are placed into a recycling container, they saturate otherwise good paper and cardboard—turning it from a recyclable commodity that can be sold, into trash that must be landfilled or burned.

Other top contaminants include "tanglers" (items such as cords, wires, tarps, clothing and hoses that get tangled in sorting equipment), plastic bags and wraps, Styrofoam and large plastic items such as kiddie pools, coolers and toys.

- **Contamination reduces the amount of quality recyclables that can be recovered and sold**
- **Contamination endangers staff at the recycling facility**
- **Contamination damages processing equipment**
- **Contamination significantly increases processing costs**

If you're not sure if an item is recyclable or not, always discard it in your gray trash cart. **When in doubt, throw it out!**

DON'T RECYCLE



these items in your blue recycling cart

These items are NOT recyclable in your blue cart.

- Electronics
- Light bulbs
- Batteries
- Household hazardous waste
- Plastic bags, plastic wrap and plastic film
- Syringes and needles
- Styrofoam
- Yard waste
- Pressurized tanks
- Construction and demolition debris
- Cooking and dining ware, drinking glasses, ceramics and cutlery
- Cooking oils and grease
- Medications and prescriptions
- Clothing hangers
- Rubber items
- Tanglers, such as cords, wires, hoses and tarps



Some of these items can be recycled at other locations. Visit HCFLGov.net/Recycling for more information.

No plastic bags in your blue cart

Plastic bags, plastic wraps, bubble wrap and plastic films are not recyclable in your blue cart.

Recycle plastic bags at your local grocery or big box store, or reuse them as trash bags or pet waste bags. Discard other types of plastic wraps and films in your gray trash cart.

Never bag your recyclables before putting them in your blue cart. Bagged recyclables can't be sorted by recycling equipment—and end up as trash.

No food in your blue cart

Food waste of any type is NOT recyclable in your blue cart. Food waste should be discarded in your gray cart.

Always rinse recyclable food and drink containers before placing them in your blue cart. When dirty items are placed in your blue cart, they can contaminate the entire load of recycling.

Food waste can be composted into a fertile soil amendment for use in your yard or garden. To learn more about composting, attend a free "Compost Happens" workshop. Sign up at sfyl.ifas.ufl.edu/hillsborough/lawngarden/composting.



You've been tagged

If you place items in your blue cart that are not recyclable, your cart may not be emptied and an "Oops!" recycling cart notification tag will be placed on it to let you know what the nonrecyclable items are.

Just remove the nonrecyclable items and place your recycling cart at the curb on your next regularly scheduled recycling day.

Oops ... Your Recycling Cart was Contaminated

There were unrecyclable items in your blue recycling cart. Please help us reduce contamination by placing only accepted recyclables in your blue cart.

These items should NOT go in your blue cart:



Plastic Bags



Electronics



Clothing/Shoes



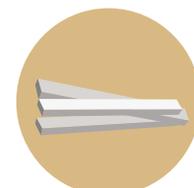
Cords/Wires



Rope/Twine



Garden Hoses



Construction & Demolition Debris



Clothes Hangers



Household Hazardous Waste



Soiled Paper Items



Food Waste



Diapers

Thank you for recycling correctly. Contact us for information about how to properly dispose of these items and other recycling questions:



Hillsborough County Florida

(813) 272-5680

HCFLGov.net/Recycling

Going beyond
the text

Working together

Our city and county governments know the importance of working together. With your class, make a list of all of the characteristics that are needed to work together as a team. After you create your list, identify the five most important characteristics. Write down each word, and under the word, explain in a few sentences why each of these characteristics is important. Next, look for articles, photos or cartoons in the *Tampa Bay Times* that demonstrate each of these characteristics. Explain how each characteristic is being demonstrated. Share what you have read about and learned with your classmates.



Sources:
Hillsborough
County, Waste
Management

Trash the tanglers

Items such as plastic bags, cords, wires, tarps, clothing and hoses jam and damage recycling sorting equipment. **They should never be placed in your blue cart.**

Not only can these items damage the equipment, but workers must manually remove them, a difficult, dirty and potentially dangerous task.

Recycle plastic bags at your local grocery or big box store, or reuse them as trash bags or pet waste bags.

Cords, wires, tarps and hoses of any type should always be discarded in your gray cart.

Trash these tanglers to help us keep our recycling equipment working to recycle items that we can successfully recover!

Prevent contamination

An average of one in four items placed in a recycling container is not recyclable through curbside programs. Recycle right so that your efforts are not “wasted”!

Source: Waste Management

Keep Recycling Tangler-Free Tampa Bay

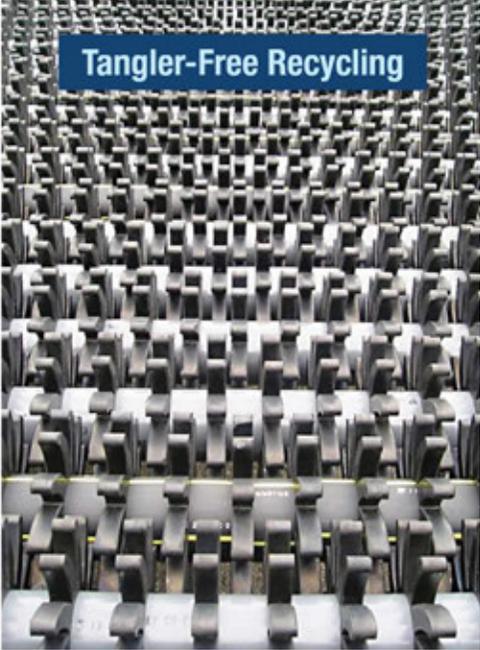


Plastic bags, hoses, cords, ropes, clothes and other tanglers shut down the recycling process.

Recycle right and toss tanglers in the trash!



Contaminated Recycling



Tangler-Free Recycling

TampaBayRecycles.org   Hillsborough County Florida 



Tampa Bay Recycles

tampabayrecycles.org

#TampaBayRecycles

Local governments in Hillsborough and Pinellas counties have teamed up to improve recycling efforts in the region. In addition to Hillsborough County, Tampa Bay Recycles partners include Pinellas County, the City of Tampa and the City of St. Petersburg.

Learn more at tampabayrecycles.org and join the social media conversation, share recycling tips and ask questions by using #TampaBayRecycles on Twitter.

What should I do with used batteries?

Never place batteries of any type in your blue recycling cart.

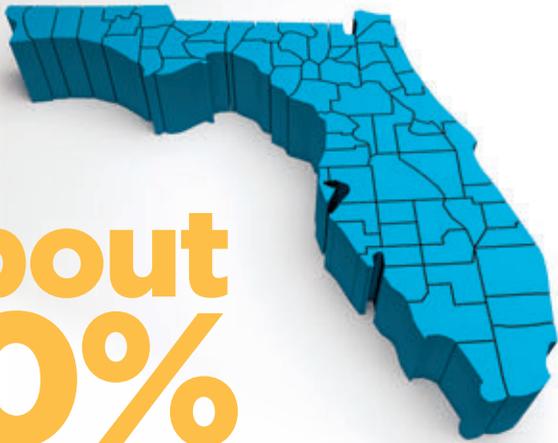
- **Alkaline batteries** (such as AA, AAA, C, D or 9-volt) can be safely disposed of in your gray curbside trash cart.
- **Cordless power tool battery packs** (limit 5 per month) should be brought to a Hillsborough County Community Collection Center or Household Hazardous Waste Collection Center. See Pages 8-9 for locations.
- **Lead-acid batteries** found in automobiles, motorcycles, lawn mowers and boats should be brought to a Hillsborough County Community Collection Center or Household Hazardous Waste Collection Center. See Pages 8-9 for locations.
- **Rechargeable batteries** (such as Ni-Cd, lithium and lithium-ion) found in cellphones, digital cameras, laptops, hearing aids, watches and keyless remotes should be individually bagged and brought to a Hillsborough County Community Collection Center or Household Hazardous Waste Collection Center. See Pages 8-9 for locations.

For more information, visit HCFLgov.net/Recycling and click on Batteries.



Free battery disposal is also available at retail locations as part of the Call2Recycle program.

Visit call2recycle.org for more information and drop-off locations.



About 30%

of materials sent to Florida recycling facilities is not recyclable in curbside programs.

Eliminating contamination in curbside recycling bins could save

\$100 million

in recycling costs in one year.

Source: Florida Department of Environmental Protection

For safety's sake

Keep lithium-ion batteries out of trash and recycling to prevent fires

Lithium-ion batteries have become very popular in products such as cellphones, laptops and tablet computers because they are lighter, store more energy and hold their charge better than other types of rechargeable batteries.

Lithium-ion batteries also have a major shortcoming: They can catch fire and explode if overcharged, exposed to excessive heat or damaged. This is why the Federal Aviation Administration has set limits on how lithium-ion batteries can be transported on airplanes.

Materials in the curbside trash and recycling collection systems are not treated gently. They can be bulldozed, crushed, dropped, run over and punctured during collection and during the unloading and sorting processes at waste and recycling facilities.

When lithium-ion batteries are put into curbside trash or recycling carts, they can easily be damaged and explode, causing fires in trucks and at waste and recycling facilities. This not only damages expensive equipment and forces facility shutdowns, it also puts employees and the public at serious risk. A fire in a facility filled with flammable materials such as cardboard, paper and plastic can be extremely dangerous and difficult to extinguish.

Sources: HowStuffWorks, Recycling Today, Resource Recycling, U.S. Environmental Protection Agency

Never place lithium-ion batteries in your blue recycling cart or your gray trash cart. Always recycle them at a Hillsborough County Community Collection Center or Household Hazardous Waste Collection Center or at a Call2Recycle retail location.

Going beyond the text

Rethink. Reset. Recycle.

“Wish-cycling” is well-intentioned recycling that ends up creating more problems than solutions. While the causes of wish-cycling may be noble, the effects can be detrimental. Research this issue on the Florida Department of Environmental Protection’s “Reset, Rethink, Recycle” website: floridarecycles.org. Using the

information on this website, write down the causes and effects of contaminating home recycling bins. Next, look in the *Tampa Bay Times* for pictures of items that can and cannot be recycled to illustrate your list. Finally, write a cause-and-effect-argument article explaining how Hillsborough County residents can help Florida reach its statewide goal of a 75 percent recycling rate by 2020 by rethinking what you thought you knew about curbside recycling and resetting your behavior. Use the opinion articles and editorials in the *Times* as models.



Questions about HHW?

Visit HCFLgov.net/HHW

Call 813-272-5680, option 4

Email PUD-SpecialWaste@HillsboroughCounty.org

HOUSEHOLD HAZARDOUS WASTE HHW

Household Hazardous Waste Collection Centers

Hillsborough County makes it easy for residents to dispose of unwanted or expired HHW items. Just bring your HHW, along with a photo ID, to one of Hillsborough County's three HHW Collection Centers.

Sheldon Road Household Hazardous Waste Center

Accepts HHW on the first Saturday monthly, 8 a.m. – 2 p.m.
9805 Sheldon Road
Tampa, FL 33635

South County Solid Waste Facility

Accepts HHW on the second Saturday monthly, 8 a.m. – 2 p.m.
13000 U.S. 41
Gibsonton, FL 33534

Hillsborough Heights Solid Waste Facility

Accepts HHW on the third Saturday monthly, 8 a.m. – 2 p.m.
6209 County Road 579
Seffner, FL 33584

Residents must show a valid photo ID. HHW is accepted only during the days and times listed. Commercial or excessive quantities of waste will not be accepted.

Many of the everyday products we use in our homes are potentially harmful to humans, wildlife and the environment.

Products that contain ingredients that are toxic, flammable, corrosive or reactive are known as household hazardous waste (HHW).

Common examples of HHW include household cleaners, solvents, paints, stains, pesticides, herbicides, antifreeze, motor oil, nail polish remover, flares, propane tanks, ammunition, pool chemicals and rechargeable batteries.

Improper disposal of HHW can pollute

the environment, endanger wildlife and threaten human health. All unwanted or expired HHW items should be taken to a Household Hazardous Waste Collection Center for proper disposal.

DON'T put HHW in your blue recycling cart.

DON'T put HHW in your gray trash cart.

DON'T pour HHW down the drain or toilet, on the ground or into storm sewers.

DO take HHW to a Household Hazardous Waste Collection Center for proper disposal.



Items accepted

at Hillsborough County HHW Collection Centers

- Aerosols
- Ammunition and flares
- Cleaning chemicals
- Gasoline and diesel fuel
- Mercury thermostats and thermometers
- Motor oil and automotive fluids
- Cooking oil
- Fire extinguishers
- Fluorescent light bulbs (limit 10 bulbs)
- Paint, stain and varnish (limit 10 1-gallon containers and five 5-gallon containers; must be sealed and not leaking)
- Paint primer, thinner and stripper
- Pesticides, herbicides and insecticides
- Pool and spa chemicals
- Propane tanks (30 pounds or less) and helium tanks (20 pounds or less) (limit 5 tanks)
- Rechargeable batteries (including Ni-Cd, lithium and lithium-ion)
- Auto, motorcycle, lawn mower and marine batteries

Cooking Oil Recycling Effort (CORE)

Used cooking oil is also accepted at Cooking Oil Recycling Effort stations located throughout the county. Visit HCFLgov.net/CORE for more information and locations.

Cooking Oil Recycling Effort



Hillsborough County Community Collection Centers

Hillsborough County operates four Community Collection Centers (CCCs) to provide residents a convenient and responsible means of disposing of items not collected curbside.

All residents of Hillsborough County, including those residing in Tampa, Temple Terrace and Plant City, have access to the CCCs to dispose of unwanted electronics, paint and rechargeable batteries by showing a **valid photo ID** to verify they live within the county.

However, only residential customers who pay the annual Hillsborough County solid waste assessment on their property tax bill have full access to the CCCs to dispose of other items.



Hillsborough County Community Collection Center locations

Hours: Mon. - Sat., 7:30 a.m. - 5:00 p.m.

Alderman Ford

9402 County Road 39
Lithia, FL 33547

Northwest County

8001 W Linebaugh Ave.
Tampa, FL 33625

Hillsborough Heights

6209 County Road 579
Seffner, FL 33584

South County Solid Waste Facility

13000 U.S. 41
Gibsonton, FL 33534

Remove yard clutter— don't give mosquitos a home

Removing appliances, old furniture, tires and other debris from your yard helps eliminate mosquito breeding habitat. Disease-carrying mosquitos can breed in as little as one teaspoon of water. Bringing your yard debris to the CCC can help protect you and your family from mosquito-borne diseases such as chikungunya fever, dengue fever, malaria, West Nile virus and Zika!



Going beyond the text

Practicing good citizenship

Recycling is in the news this year. The main reason involves new restrictions on shipping U.S. waste and recyclables to China. Did you know that China is the world's largest recycler? Read the Front Page Talking Points essay "Americans need to pay closer attention to what we toss in recycling bins", nieonline.com/tbtimes/

frontpage.cfm?lessondate=20180625. Watch the video, *Why Is Our Recycling Going to Landfills?* Then, using this publication and the *Tampa Bay Times*, complete the Use your newspaper action point activities. Share what you have learned with your class.

ITEMS ACCEPTED AT Hillsborough County Community Collection Centers

All Hillsborough County residents

– must bring valid photo ID

- **Electronics**
(limit five items per month)
- **Paint, stain and varnish**
(limit 10 1-gallon containers and five 5-gallon containers; must be sealed and not leaking)
- **Rechargeable batteries** (including Ni-Cd, lithium and lithium-ion and lead-acid; must be individually bagged)



Hillsborough County Solid Waste Management customers

– must bring valid photo ID and Hillsborough County tax assessment (property tax bill) which can be downloaded from hillstax.org/services/asp

- **Automotive tires**
(limit 12 per year)
- **Concrete**
- **Furniture**
- **Household appliances**
- **Mattresses and box springs**
- **Steel**
- **Tile**
- **Treated wood**

Taxing Authority	Telephone	Millage	Assessed Value	Exemption	Taxable Value	Tax Amount
COUNTY OPERATING	813-555-1234	5.74800	106320000	25000	106305000	611,185.23
ENVIRONMENTAL LAND	813-555-5258	0.80450	106320000		106320000	8,426.14
LIBRARY SERVICE	813-555-4799	0.40950	106320000	25000	106305000	4,325.97
SCHOOL - LOCAL	813-555-2388	2.78800	106320000	25000	106305000	2,945.59
SCHOOL - STATE	813-555-4547	4.78400	106320000	25000	106305000	64,718.86
PORT AUTHORITY	813-555-1403	0.19200	106320000	25000	106305000	2,755.56
TRANSPORT AUTHORITY	813-555-6835	0.44950	106320000	25000	106305000	109,964.11
CHILDREN'S BOARD	813-555-3214	0.48340	106320000	25000	106305000	291,410.43
WATER MANAGEMENT	813-555-5876	0.88800	106320000	25000	106305000	21,087.09
WATER MANAGEMENT H	813-555-2948	0.29470	106320000	25000	106305000	47,823.85
TAMPA CITY	813-555-7886	0.73200	106320000	25000	106305000	49,302.62
PARKS BONDS - UNINCORPORATED	813-555-3548	3.43500	106320000	25000	106305000	61,121.63
						25,737.75
Total Millage						21,423.93
Total Ad Valorem Taxes						6,026,020.29

Taxing Authority	Telephone	Tax Amount
CAZD006 (BONDED) WATER DEPT	813-555-1234	28.43
PANTHER TRACE	813-555-3256	1,183.24
STORMWATER MANAGEMENT	813-555-8796	12.80
COUNTY SOLID WASTE SWC	813-555-2385	87.89
COUNTY SOLID WASTE SWC	813-555-8547	105.61

Going beyond the text

Litter laws

Every municipality manages litter regulations differently. What happens to those who litter or abandon trash in Hillsborough County? In your opinion, are the existing laws on litter and illegal dumping adequate? If you were in charge, would you keep these rules or create your own?

With a team, research Florida and Hillsborough County laws on litter and illegal dumping. Note the potential consequences for people who violate the law. Next, develop a list of five actions related to littering (for example, dumping garbage on the side of the road, leaving picnic waste at a beach, throwing gum out of a car, not cleaning up after your pet). For each action, research the potential environmental effects of the action. Next, develop a law and a legal consequence for each action (for example, should offenders pay a fine, perform community service, go to jail). Create a chart to display your conclusions to the rest of the class. Finally, using the editorials and letters to the editor in the *Tampa Bay Times* as models, write a letter to the editor urging your local officials to adopt one of your laws.

Research resources:

- laws.flrules.org/search
- leg.stwate.fl.us/statutes
- library.municode.com/fl/hillsborough_county

Adapted from: "Make Your Own Marine Debris Laws," *The Educator's Guide to Marine Debris: Southeast and Gulf of Mexico*, Center for Ocean Science Education Excellence Southeast (COSEE SE)

Take pride in your community with Adopt-A-Road

In the Adopt-A-Road program, businesses and organizations "adopt" a 1-mile stretch of right-of-way and commit to keeping it litter-free for two years. Join the hundreds of Hillsborough County residents who are improving our community's roadways by volunteering today! Contact adoptaroad@keptbb.org to learn more.

Litter harms our community and waterways

Littering and illegal dumping of trash pollute the environment, harm wildlife, increase costs to taxpayers and businesses, lower property values and threaten human health.

- Litter and trash clog storm drains and sewers, causing flooding in our neighborhoods
- Litter and trash make their way through drains to end up on our beaches and in our waterways
- Wildlife and pets get poisoned by, tangled in and injured by litter and trash
- Littered open containers and debris such as tires become breeding grounds for disease-carrying mosquitoes
- Illegal dump sites attract rodents and insects and are dangerous to children and animals

Sources: Hillsborough County, Keep America Beautiful, Keep Tampa Bay Beautiful

Litter Hotline

Report littering activity in Hillsborough County anonymously by calling the Litter Hotline at 877-Y-Litter (have the license plate number, date, time and location of the incident ready).

Keep Tampa Bay Beautiful

Hillsborough County partners with Keep Tampa Bay Beautiful to combat litter. Volunteer opportunities, activities and events include:

- Adopt-A-“_____” programs (groups can adopt roads, parks, shorelines and more)
- The Great American Cleanup
- Hillsborough River and Coastal Cleanup
- America Recycles Day
- Education program in Hillsborough County Public Schools



**Keep
Tampa Bay
Beautiful**
KEEP AMERICA BEAUTIFUL AFFILIATE

For more information, visit keptampabaybeautiful.org, email info@keptbb.org or call 813-221-8733.

2017 International Coastal Cleanup in Florida

21,010

people participated

173,552

pounds of trash collected

2,904

miles cleaned

644,422

items collected

Source: Ocean Conservancy

Top 10 items collected during the 2017 International Coastal Cleanup

1. **Cigarette butts (2,412,151)**
2. **Food wrappers (1,739,743)**
3. **Plastic beverage bottles (1,569,135)**
4. **Plastic bottle caps (1,091,107)**
5. **Plastic grocery bags (757,523)**
6. **Other plastic bags (746,211)**
7. **Straws and stirrers (643,562)**
8. **Plastic take-out containers (632,874)**
9. **Plastic lids (624,878)**
10. **Foam take-out containers (580,570)**



Going beyond the text

Science journalism

Science journalists translate scientific concepts into language that readers without a scientific background can understand. According to the Council for the Advancement of Science Writing, they also must put scientific discoveries into historical, political, economic and social context.

Using the articles in the *Tampa Bay Times* as models, research and write an article about waste-to-energy. Be sure to explain the technology of how WTE converts trash to electricity. Then, choose one historical, political, economic or social issue associated with WTE. Create a presentation using PowerPoint or Prezi exploring the issue you selected. Be sure to cite your sources!

Career search

Careers in recycling and waste management are challenging, well-paid and rewarding. Look in the *Tampa Bay Times* and on HCFLgov.net/jobs for positions that involve recycling and waste management. Make a list of all of the jobs you find. What skills are needed for these positions? What type of education is required? Discuss what you have found with your class.



Prevent littering and illegal dumping

Littering and illegal dumping of trash are more than just cosmetic problems. They pollute the environment, threaten human health, harm wildlife, lower property values and impact our quality of life.

Litter and trash clog storm drains and sewers and end up in our waterways. Wildlife and pets get poisoned by, tangled in and cut by litter. Roadside food waste attracts animals to dangerous traffic.

Littered open containers and debris such as tires become breeding grounds for disease-carrying mosquitoes. Illegal dump sites attract rodents and insects, harm property values and are dangerous to children and animals.

Littering and illegal dumping cost us money: Cleanup costs in the United States are almost \$11.5 billion each year, according to Keep America Beautiful.

Littering and illegal dumping are not only morally wrong, harmful and expensive—they are illegal. Penalties for littering or illegal dumping in Florida can include community service, fines, points on your driver's license, misdemeanor or felony charges and jail time.

Sources: Florida Legislature, Hillsborough County, Hillsborough County Sheriff's Office, Keep Tampa Bay Beautiful

Report illegal dumping

Help keep Hillsborough County clean and safe by reporting illegal dumping. Visit hillsboroughcounty.org/en/residents/property-owners-and-renters/code-violations/action-folder/report-illegal-dumping.

Waste-to-energy

Waste-to-energy (WTE) plants burn municipal solid waste—your trash—and use the heat to generate electricity.

The Hillsborough County Resource Recovery Facility can burn up to 1,800 tons of waste per day, producing enough electricity to power 35,000 homes. This electricity is used to power county facilities and is sold to the local electric grid.

WTE offers many environmental benefits over landfilling trash:

- Reduces greenhouse gases that contribute to climate change
- Conserves land by reducing the need for landfills
- Generates clean, renewable energy

WTE also offers significant economic benefits. WTE facilities generate revenue by selling energy to the local power grid and create high-paying jobs that cannot be outsourced. The average WTE plant is responsible for nearly 60 jobs!

Sources: Environmental Protection Agency, Hillsborough County, Solid Waste Association of North America, Waste-to-Energy Research and Technology Council



Garbage is lifted by a crane and placed into a hopper.
Skip O'Rourke, Times

The Hillsborough County Resource Recovery Facility:



Generates
\$16 million
per year by selling electricity to the grid



Saves
\$500,000

per year in utility costs by providing electricity to county buildings

Burns up to
1,800 tons
of trash per day

Produces
\$450,000

per year in revenue by recovering and selling recyclable metals



Your trash makes electricity



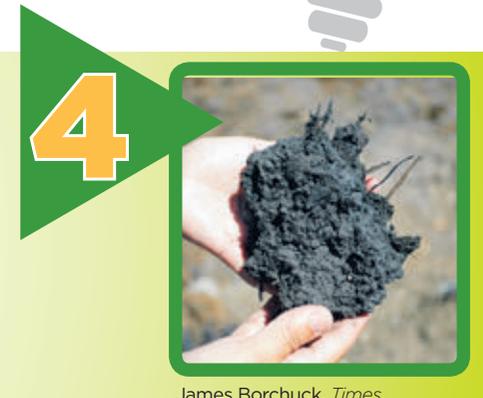
1 Trash is picked up at curbside and delivered to the Hillsborough County Resource Recovery Facility (RRF).



2 At the RRF, trash is incinerated to produce electricity. This electricity is used to power public utilities facilities and is sold to electric utilities.



3 Metal is removed from the ash and recycled.



4 The remaining ash is landfilled.

James Borchuck, Times

