

Living the Loop: Recycling and Waste Management for First Year Bobcats

Learning Objectives:

Students will be able to explain the importance of sustainable waste management on TXST campus and their role in the three main waste reduction strategies of recycling, composting, and source reduction. Students should be able to describe the basics of how waste reduction fits into the goals of the circular economy model and the benefits of materials sustainability on a systemic level and individual level.

Delivery (Presentation Notes):

 The Trouble with Trash For thousands of years, one of the most direct ways that humans have impacted their environment has been through the production and disposal of waste. Today, sustainable waste management is a top concern as communities across the world experience the effects of urbanization, population growth, and global climate trends. In Texas, nearly half of all disposal facilities in the state are categorized as municipal solid waste (MSW) landfills, which are designed to accept household, commercial, and other nonhazardous waste. Because each landfill has a finite lifespan, it is important to help divert waste from these facilities by practicing different waste reduction strategies. Did you know? In 2024, Texans produced an average of 7.24 lbs of trash per person per day, which is about 1.5 times the national average.* This added up to a total of 41.3 million tons of waste for the entire year! MSW landfills are the third largest source of human-related methane emissions in the US. Methane is a greenhouse gas that traps heat in the atmosphere and worsens air quality. *Data from the Texas Commission on Environmental Quality	<u>The Trouble with Trash</u> The first slide serves to establish the necessity for sustainable waste management by describing the quantity of garbage produced per person in Texas and in the US in one year. While there remains much more to be said about the relationship between waste production and public and environmental health, the primary goal of this introduction is to leave students with a basic understanding of how waste diversion lengthens the lifespan of landfills and reduces greenhouse gas production.
The State of Waste Where is trash going at TXST? Texas State is a fast growing university located in one of the fastest growing counties in the country. In regions facing rapid urbanization, sustainability becomes more important as available space in local waste management facilities decreases. In 2025, 94% of the waste produced on the TXST San Marcos campus went to a landfill. As enrollment grows, Bobcats living on campus have an opportunity to participate in all of the following three main strategies for reducing the amount of waste that makes it to the dump: • Recycling • Composting • Source Reduction In 2025, the TXST San Marcos campus produced 14,001,867 lbs of landfill waste* *Data from 100% Recycling and Waste Management	<u>The State of Waste</u> This slide narrows the scope of the waste discussion by focusing on waste production at TXST, highlighting how a vast majority of waste produced on campus still goes to a landfill as opposed to being recycled or composted. It also introduces the three main categories of waste diversion that the rest of the presentation will focus on- recycling, composting, and source reduction.



Recycling on Campus

One of the easiest ways Bobcats can help divert material from landfills is by **recycling**. Recycling bins can be found on campus alongside most trash disposal sites and around outdoor common areas. Before throwing something away, always ask yourself...

Is it Recyclable?

YES*	NO
GLASS	Plastic Bags or Wraps
PAPER	Plastic Cutlery or Straws
CARTONS	Batteries, Vapes, or Flammables
PLASTIC	Food or Food Wrappers
CANS	Synfoam
	Greasy Pizza Boxes or Food Containers

*All containers must be clean and rinsed

For more information about what is and isn't accepted by TXST Recycling, visit their [website](#) or email recycling@txstate.edu

Recycling on Campus

The first of the three waste diversion strategies is recycling, which is managed on campus by TXST Grounds and Waste Management. Please note to students that though each residential hall may have a slightly different waste disposal situation, they will be able to find recycling receptacles wherever they normally dispose of garbage, whether that is in an indoor or outdoor site in their halls. Walk students through what is accepted and not accepted by campus recycling, and emphasize that any materials placed in recycling receptacles must be **CLEAN** or they might contaminate other recycling and ultimately be thrown away.

What About E-Waste?

Electronic waste, or **e-waste**, can be recycled on campus **ONLY** in official e-waste receptacles, which are emptied on a regular basis by TXST Environmental Health, Safety, Risk and Emergency Management. E-waste can become a **fire hazard** when disposed of improperly, so it is important to separate flammable items from other recyclable materials.

E-waste accepted by EHSREM includes batteries, cell phones, and rechargeable power banks. Lightbulbs should **not** be placed with batteries but can be picked up separately from other e-waste upon request by filling out a [form](#).



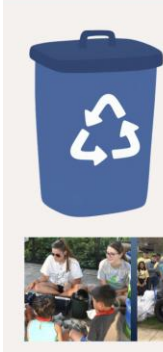
For a full list of recyclable electronics and locations where you can find e-waste recycling bins, visit EHSREM's [website](#) or contact them at **512.245.3616**.

To recycle large appliances like mini fridges and televisions, contact [Green Guy Recycling](#) or visit their Drop-Off Center on 937 Texas 80 in San Marcos.



What about e-waste?

Because electronic waste is recyclable under specific circumstances, this slide outlines how students can recycle e-waste without causing a fire hazard at regular disposal sites. Feel free to click on the EHSREM website link embedded in the slide text to show how to find a full list of green bin locations and where to find the lightbulb recycling request form. Emphasize to students that it is essential to separate e-waste from other kinds of trash and recycling for safety reasons.



City of San Marcos Resource Recovery

For Bobcats living off campus, waste disposal and recycling is managed by the City of San Marcos Resource Recovery division. Knowing who to contact for waste-related questions and what resources are available to San Marcos residents can help make your eventual transition to off-campus living easier and more efficient.

Got Hazardous Waste?

One of the services offered by the Resource Recovery division is disposal of **Household Hazardous Waste (HHW)**, which can include items like cleaning products, automotive fluids, paints, adhesives, and more. San Marcos residents, including TXST students, can drop off HHW at the **San Marcos Reuse Warehouse** at 634 E Hopkins St, and pick up free supplies as well!



For questions about city garbage collection or recycling, or to view Reuse Warehouse hours of operation, visit the San Marcos Resource Recovery [website](#) or call **512.393.8412**.

City of San Marcos Resource Recovery

Although on-campus residents' waste is managed by Texas State University, this slide is intended to introduce them to CoSM Resource Recovery, who manages waste for off campus residents. Encourage students to familiarize themselves with services offered by the Resource Recovery Division, particularly

	at the Reuse Warehouse, which can be accessed by students and residents alike.
 Bobcat Blend Often, waste that cannot be recycled can be composted. Composting is a technique by which food and garden waste is combined in a controlled environment to create a soil amendment that can be used as a natural fertilizer. Food scraps from TXST Dining Halls are composted by Bobcat Blend, a faculty-managed, student run composting program at Texas State. Compost produced by Bobcat Blend is used in campus greenhouses, landscaping, and occasionally sold to the community. Interested in Going Green? To learn how to get involved with composting on campus, visit the Bobcat Blend website or contact Dr. Tina Cade in the Department of Agricultural Sciences.	<u>Bobcat Blend</u> Because campus composting efforts are already connected to TXST Dining Services, this slide does not include a specific behavioral change for students to engage in for composting. Rather, it serves more as information to help students understand how a particularly large source of waste (food) can be handled to avoid sending it to a landfill. Be sure to highlight the contact information for Bobcat Blend for students who are interested in getting involved with composting efforts, particularly those who might be studying agriculture, biology, environmental science, or food and nutritional science.
 Straight to the Source Even more important than recycling and composting is source reduction, which prevents the creation of waste in the first place by changing how products are designed, manufactured, and purchased. Bobcats living on campus can practice source reduction by remembering the three R's: ★ Refuse Refrain from purchasing items that you don't need. Before buying something, ask yourself: How long will this last me? How often will I actually use it? Will I still like it after a few months? Cutting down on unnecessary purchases is friendly for the environment and your budget! ★ Reduce When you do have to purchase something, try to opt for items that will produce less waste. Avoid disposable items and products with excessive packaging, and be sure to buy any perishable goods in quantities you know you will be able to use before their expiration date. ★ Reuse Extend the life of your belongings by finding ways to reuse them before discarding. Many glass and plastic containers can be upcycled for storage and organization, and old textiles can be upcycled into new garments or as cleaning rags. Get creative- you may even discover a new hobby! An easy switch to reduce plastic waste is carrying a reusable water bottle!	<u>Straight to the Source</u> This slide outlines the most important waste diversion tactic, and the most easily adoptable by first year students. Frame source reduction for students as a method that helps prevent landfill trash from being created in the first place, primarily through small decisions that occur at the initial time of purchasing an item. Encourage students to ask themselves why they initially buy a product, and how and when they use it. Try to instill a sense of value for these belongings in students, especially because most students operate on tight budgets. Present source reduction as a beneficial practice not just for environmental reasons but also for financial ones.

Going in Circles

Reducing waste in your daily activities on campus is a great way to promote the **circular economy**, which aims to keep materials in circulation as long as possible and maximize the **recapture** of waste for future use in new products.

In addition to protecting the environment, the circular economy also benefits both businesses and consumers by reducing production costs and ensuring the higher quality of items on the market. Compared to a linear take-make-throw-away model, materials moving through a circular economy continually maintain their **value**.



To learn more about the circular economy and its role in a sustainable future, visit the Environmental Protection Agency [website](#) for a breakdown of how it works and the different international agencies working towards this model.



A student looks through clothes at Open Closet, an annual Office of Sustainability free thrift market that keeps donated clothes out of the landfill.

Going in Circles

Building off the previous slide, connect the three waste diversion practices to the broader concept of the circular economy. Explain how it is different from the take-make-throw away model because it prioritizes keeping materials moving through the cycle of production, use, and reuse, using the diagram in the slide to explain how materials are recaptured rather than disposed of. A link to the EPA website on waste recapture and the circular economy is also available for instructors to show students, or visit in their free time to find additional specific resources they would like to show the class.

Living the Loop

What may seem like one small decision to reuse a container, refuse a plastic grocery bag, or upcycle an old t-shirt is actually an investment in a **zero-waste** future.

The actions of one person alone cannot solve all problems related to waste management, but the actions of many combined can make sustainable materials stewardship a reality. Together, Bobcats can make choices that will be easier on the planet and on our pockets!



Living the Loop

Conclude with a call to action for students to participate in waste reduction, acknowledging that while one individual cannot alone solve all landfill waste production, there is a great value in a large population of students committing to eco-friendly waste disposal practices. Ask students to think again about the 7.24 lbs of trash generated per person per day in Texas, and how much space can be saved in landfills if every person reduced that output by 20%, 30% or 50%. Overall, students should be left with an understanding that waste reduction is a practice that only works if it is adopted by a collective through an amalgamation of relatively low effort behavioral changes.

Activity: “Where Does That Trash Go?” Quiz



Alongside the main lesson presentation, the Office of Sustainability offers an attached waste management pop quiz slide deck that can be utilized by instructors to test students' knowledge of campus waste disposal. Slides are organized in pairs like the ones below, which present one type of waste a time, asking students how they should dispose of it before revealing the correct answer in the accompanying second slide.



There are a number of different ways this activity can be facilitated in a classroom setting. Some variations of delivery style include:

- Dividing the class into two groups and having them compete to see which team can answer each waste disposal question correctly first, giving an opportunity to answer to the second team if the first one answers incorrectly.
- Going through the slides as a class, pausing between waste items to facilitate a short class discussion around what students think the correct answer is before moving on to the answer.

- Calling on students randomly in a raffle style method to answer each question on their own, perhaps allowing them to “phone-a-friend” if they do not know the answer. This method may be useful with classes that are generally more shy or less responsive to activity participation.

The key to this activity is simply to make it as engaging as possible to your audience, which may require some tailoring depending on the personalities present in your classroom or goals you have for class participation. This pop quiz should be a low stakes and friendly environment to learn about waste disposal, and should be a simple and successful activity for students to interact with each other and engage with campus waste management systems on a practical level.