

Zero Waste Initiatives

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UCR Facilities Services
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University of California, Riverside

Ranked in the top 15 for best public universities in the nation and:

No. 2

OVERALL

-U.S. NEWS SOCIAL MOBILITY
RANKINGS

26,809

TOTAL STUDENTS
ENROLLED IN FALL 2022

No. 4

PELL GRANT
PERFORMANCE

-WASHINGTON MONTHLY

No. 23

BEST VALUE
PUBLIC
UNIVERSITY

-PRINCETON REVIEW



UCR Facilities Services

We maintain buildings, facilities, and landscapes totaling over:

3

MILLION SQUARE FEET OF
SPACE

400

ACRES OF CAMPUS LANDSCAPE

6

MILES OF UTILITY TUNNELS
BENEATH CAMPUS

About FS

- 17,200+ work orders processed last year.
- 100+ senior custodians servicing the campus 24 hours a day/7 days a week.
- 9 maintenance shops including locksmiths, electricians, HVACR technicians, carpenters, painters, plumbers, and more.
- 1,000 event support requests last year.
- Steam plant operates 24/7 —the heart of the utility infrastructure on campus.



Every day...

UCR generates waste

UCR's Waste Breakdown

Tons per year

1,641

Landfill

515

Recycle

297

Organics

Our recycling & refuse team

- Services the entirety of campus including apartments, residence halls, and dining facilities.
- Administers 350+ dumpsters and 7 compactors on campus.
- Consists of 4 staff overseeing operations.



Our goals

- Divert **90%** of municipal solid waste, or MSW, from landfill through our Zero Waste program.
 - We are currently diverting over **50%** of the municipal waste previously sent to landfill.
- SB1383 & AB827 compliance.
- UCR Trash/ Recycle route Waste Characterization.
- We partner with organizations on campus:
 - [Office of Sustainability](#)
 - [Environmental Health & Safety](#)
 - [Dining Services](#)
 - [Housing Services](#)
 - [R'Garden](#)
 - [GCAP](#)
 - [UCR College Corps Fellows](#)



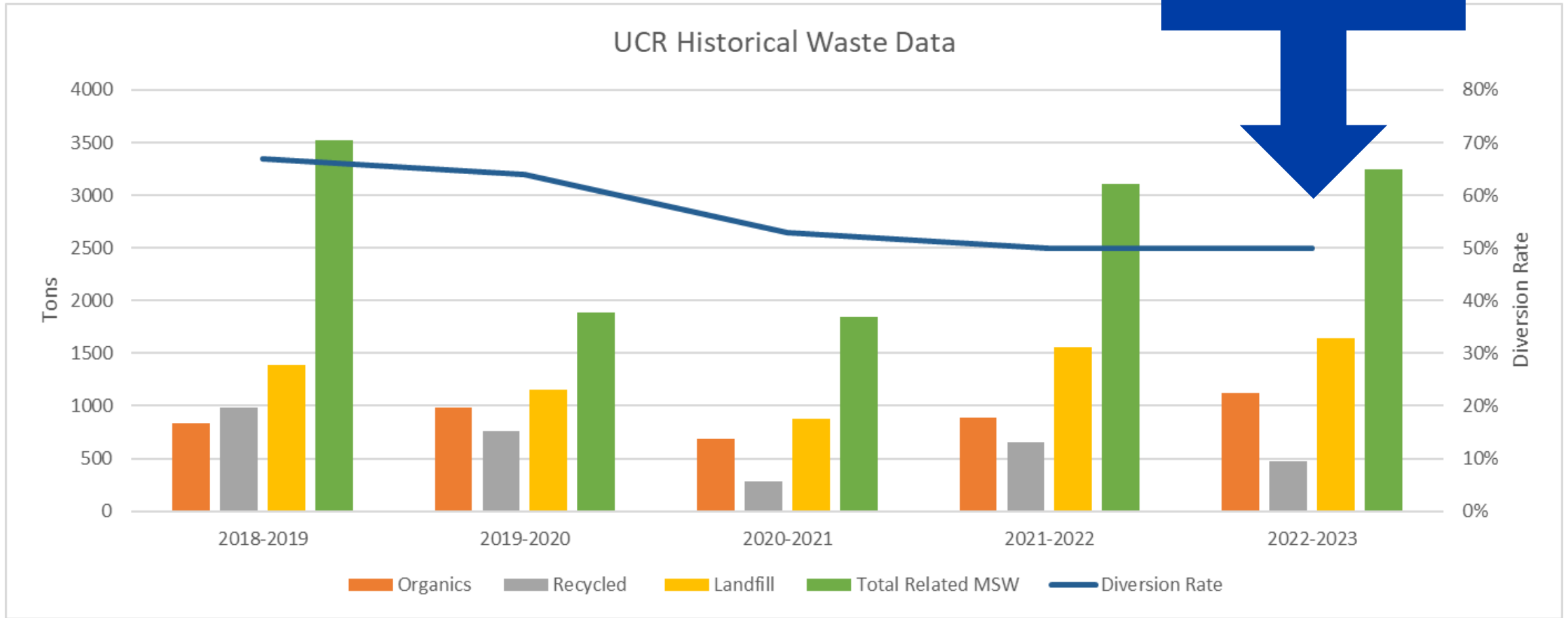
The background image shows a vast landfill filled with a sea of colorful plastic waste, including bottles, bags, and other debris. A yellow Komatsu excavator is positioned on the right side, partially submerged in the trash. In the lower-left area, a person is seen scavenging through the waste. The overall scene conveys the scale of waste production and disposal.

What is the UC Zero Waste program?

It's imagining the world without waste —

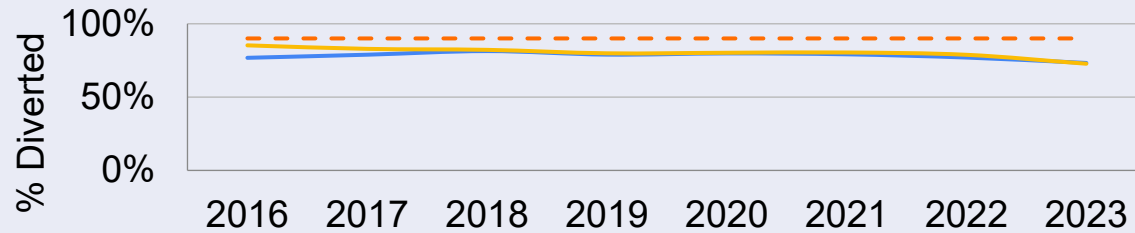
- Aiming to eliminate waste and pollution in an economical, efficient, and visionary way
- So nothing is sent to landfills, burned/ buried, or harms the environment.

Our progress

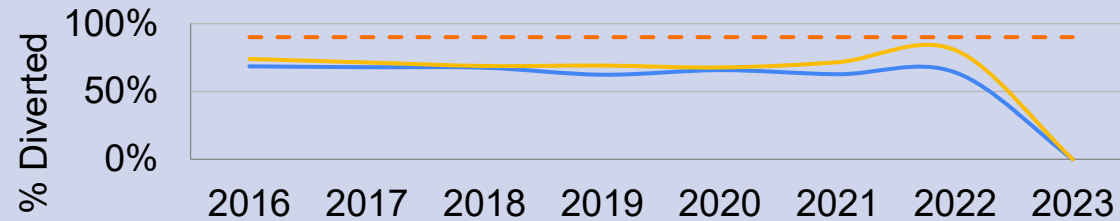


How UCR compares

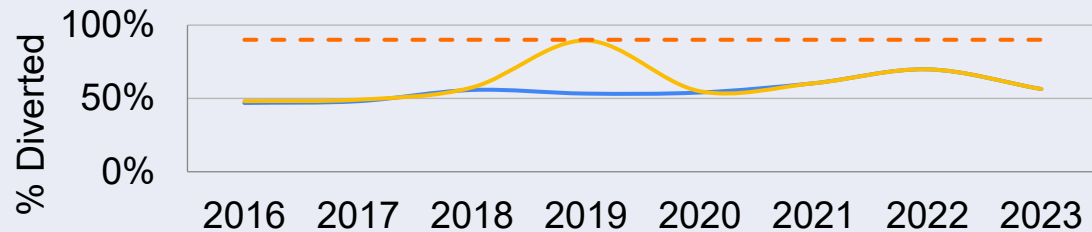
UC IRVINE



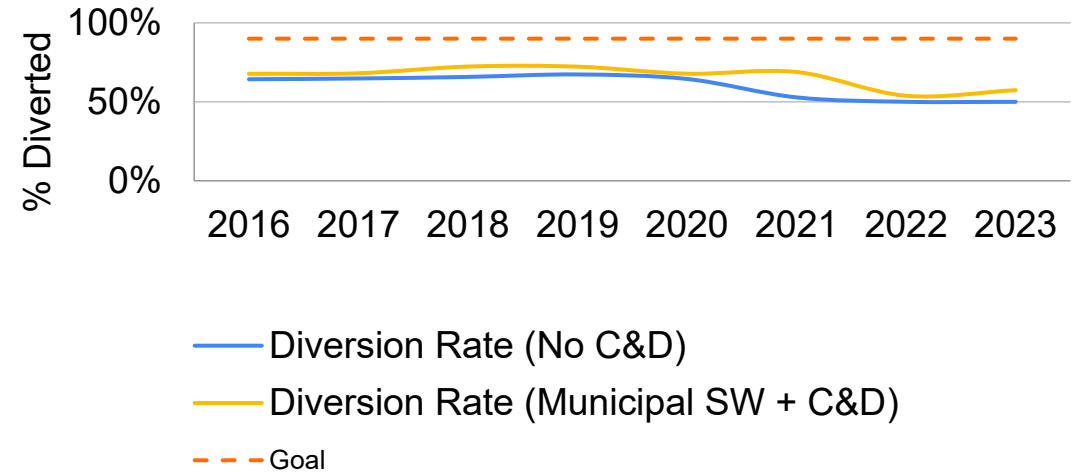
UC SANTA BARBARA



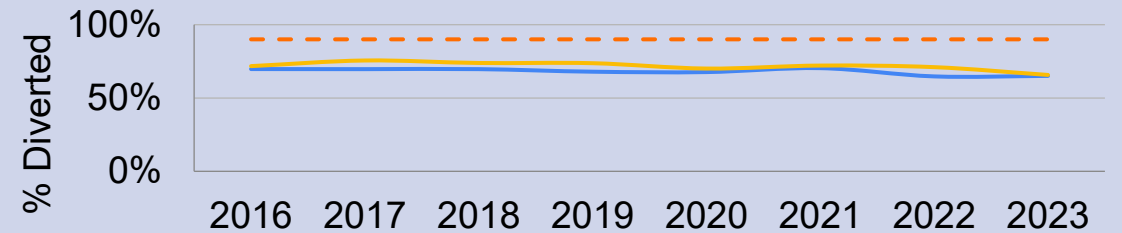
UC BERKELEY



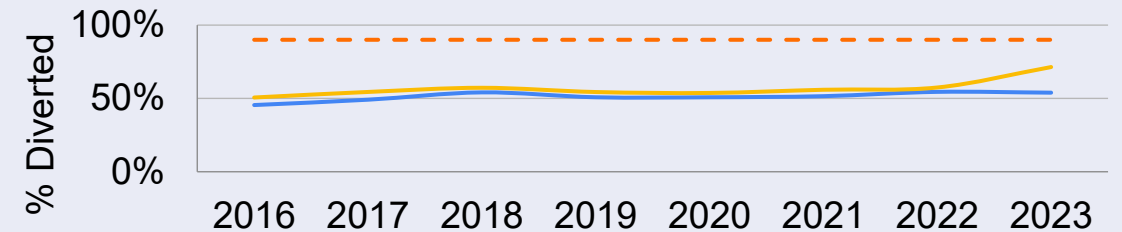
UC RIVERSIDE - ZERO WASTE - DIVERSION



UC DAVIS



UCLA



UC sustainable practices

- Prioritize waste reduction through reducing, reusing, recycling, and composting.
 - Collaborate with outside vendors and companies to supply more reusable and recyclable products on campus.
 - Support the sustainable management of waste to reduce atmospheric carbon emissions.
 - Preference for prepackaged and sealed food brands that have locally compostable/recycled packaging options.
- Elimination of single -use items:
 - Prohibit the distribution of plastic bags.
 - Replace disposable single-use accessory items with reusables or locally compostable alternatives.
 - Phase out the purchasing and distributing of single -use plastic beverage bottles with non -plastic alternatives.
 - Install more water refill stations.

Zero waste resources on campus

ScotSurplus

A second-hand shop which offers a wide variety of technology, furniture, clothing, and supplies to students, staff, and the public.

R'Pantry

A food and resource distribution site for students, faculty, and staff to reduce food-insecurity on campus. They also take food donations.

R'Garden

Grows seasonal produce and is free to students, faculty, staff, and local community members.

R'Closet

A professional secondhand clothing shop which offers blazers, dresses, shoes, and more. Students can pick up to three free items per quarter.

Shredding/ E-Waste/ Cartridge Recycling

Available through Campus Business Services and Receiving Services.



Our next steps

- Increase outreach to campus community.
- Recycling Styrofoam.
- Composting animal bedding.
- Composting at residential halls and campus apartments.
- Apply to third party foodservice facilities that lease space or provide contracted services.
- Realign marketing and publication with state policy.

Zero Waste Initiatives

- UC and Burrtec Waste Industries, Inc. partnership
- Bigbelly waste bins
- Centralized office waste bins

UCR Recycles Styrofoam

- We can now recycle large pieces of Styrofoam.
- Please place Styrofoam into the blue, recycle bins.
- Large Styrofoam that does not fit in the indoor blue bins need to be placed directly into the loading dock blue recycle bin.
- We are communicating this change to customers to place Styrofoam in blue bins at labs, offices, and loading docks.





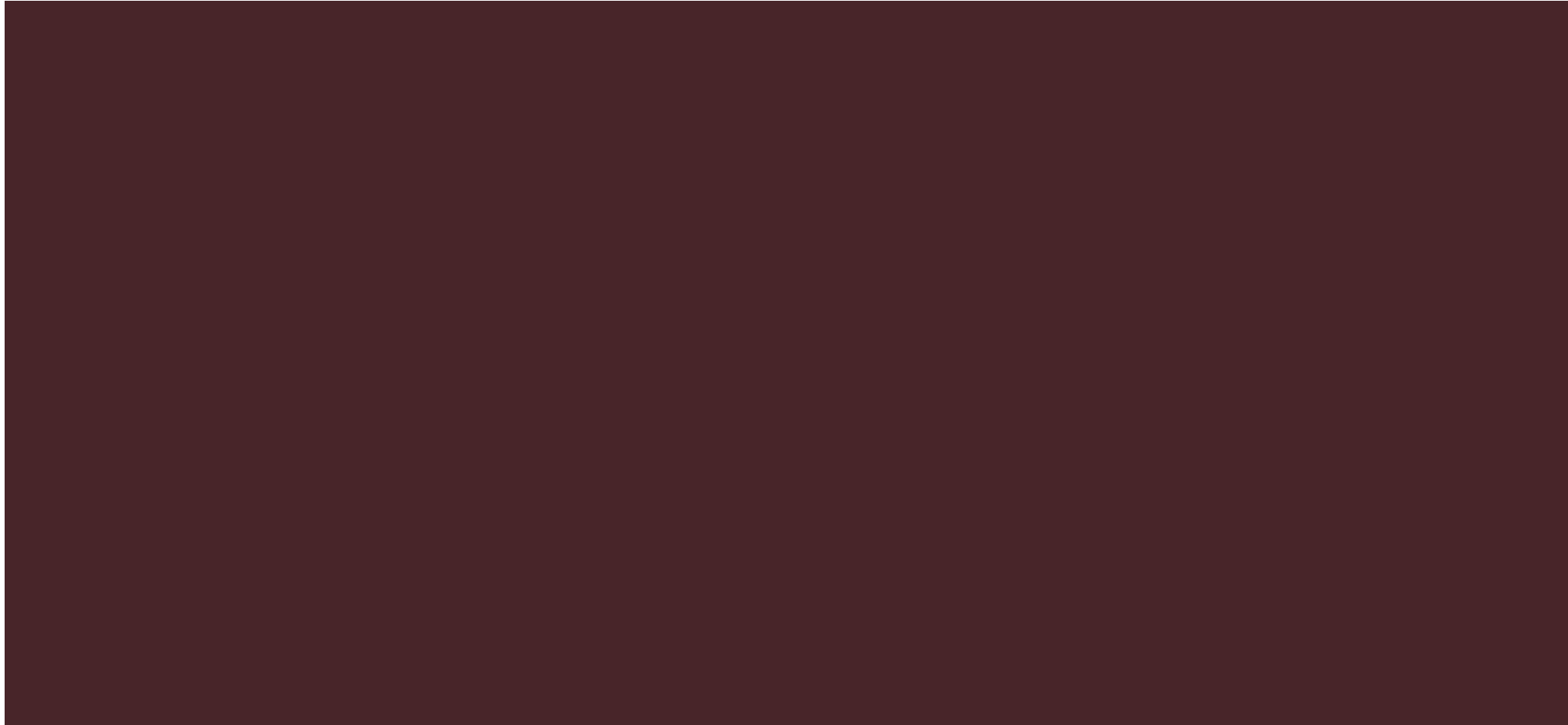
UC and Burrtec partnership

Burrtec Industries Inc. — material recovery





Burrtec Industries Inc. — sustainable organics



ORGANICS RECYCLING

SENATE BILL 1383 AND YOUR BUSINESS

WHY IS ORGANIC WASTE A PROBLEM?

- Organic waste in landfills accounts for 20 percent of the methane gas generated in California. The state agency CalRecycle reports that the super-pollutant methane has a short life span, but a long-term impact on the climate. Targeting methane reductions in emissions is an effective mechanism for combating climate change and moving toward a more sustainable future.
- The implementation of the state's organic waste reduction regulations adopted under Senate Bill 1383 (Short Lived Climate Pollutants) is the next critical step to protect our communities and our environment from the impacts of climate change.

HOW ARE BUSINESSES AFFECTED?

Under SB 1383, businesses are required to:

- Subscribe to organic waste collection service provided by Burrtec.
- Ensure employees, contractors, tenants, and customers have access to an adequate number, size, and location of containers with appropriate labels and container color.
- Provide containers for the collection of all waste streams including trash, food waste and recyclables in all areas where disposal containers are provided for customers, except for restrooms.
- Provide information to new tenants before or within 14 days of occupation of the premises.
- Prohibit employees from placing organic waste in a container not designated to receive organic waste.

WHAT ARE THE ADDITIONAL REQUIREMENTS?

If your business is a supermarket, grocery store, food service provider, distributor, or wholesale food vendor, you are classified as a tier one commercial edible food generator and have additional requirements such as:

- Not intentionally spoil edible food that is capable of being recovered by a food recovery organization or service.
- Arranging via contract with a food recovery organization or service to recover the maximum amount of edible food that would be redistributed for human consumption.

VISIT BURRTEC.COM TO LEARN MORE ABOUT:

- Information on methods for the prevention of organic waste generation, recycling organic waste on-site, sending organic waste to community composting, and any other local requirements regarding organic waste.
- A list of food recovery organizations and food recovery services.
- Information on how to minimize the creation of food waste, utilize the food recovery organizations for excess edible food waste, ensure edible food waste is not intentionally spoiled, and document edible food waste contributions to the program.

BURRTEC

"We'll Take Care Of It"

Commercial Food Waste Recycling

CalRecycle reports that recycling organic waste, including food waste, is the next critical step to protect our communities and our environment from the impacts of climate change. Organic waste in landfills accounts for 20 percent of the methane gas generated in California. Methane, a super-pollutant, has a short-term atmospheric life, but a long-term impact on the climate. Targeting methane reductions is an effective strategy to combat climate change and move towards a more sustainable future.

The goal of Senate Bill 1383 is to achieve a 75 percent reduction of the statewide disposal of organic waste by 2025. All residents must adhere to this law and recycle both food waste and green waste.



BURRTEC.COM



Black/Gray Container
is for trash



DO NOT ADD HAZARDOUS WASTE

BLACK/GRAY CONTAINER GUIDE

YES

- ✓ Clothing
- ✓ Diapers
- ✓ Dishware
- ✓ Flower pots
- ✓ Hoses
- ✓ Plastic bags
- ✓ Pet waste
- ✓ Plastic toys
- ✓ Plastic utensils
- ✓ Shrink wrap
- ✓ Straws
- ✓ Window glass
- ✓ Wipes

NO

- ✗ Batteries
- ✗ Electronic waste
- ✗ Hazardous waste
- ✗ Hot ashes
- ✗ Infectious waste
- ✗ Flammables
- ✗ Fluorescent bulbs
- ✗ Machinery
- ✗ Paint
- ✗ Pesticides
- ✗ Oil
- ✗ Sharps
- ✗ Tires

Blue Container
is for recyclables



DO NOT BAG RECYCLABLES

BLUE CONTAINER GUIDE

YES

- ✓ Aerosol cans
- ✓ Aluminum cans
- ✓ Cardboard
- ✓ Catalogs
- ✓ Envelopes
- ✓ Glass bottles & jars
- ✓ Junk mail
- ✓ Newspaper
- ✓ Paper
- ✓ #1 - #7 Plastics
- ✓ Tin cans
- ✓ Tissue boxes
- ✓ Wrapping paper

NO

- ✗ Bubble wrap
- ✗ Carpet
- ✗ Clothing
- ✗ Diapers
- ✗ Dishware
- ✗ Electronics
- ✗ Furniture
- ✗ Hoses
- ✗ Mirrors
- ✗ Pet food bags
- ✗ Plastic toys
- ✗ Stuffed animals
- ✗ Wax paper

Green Container
is for green waste



DO NOT BAG GREEN WASTE

GREEN CONTAINER GUIDE

YES

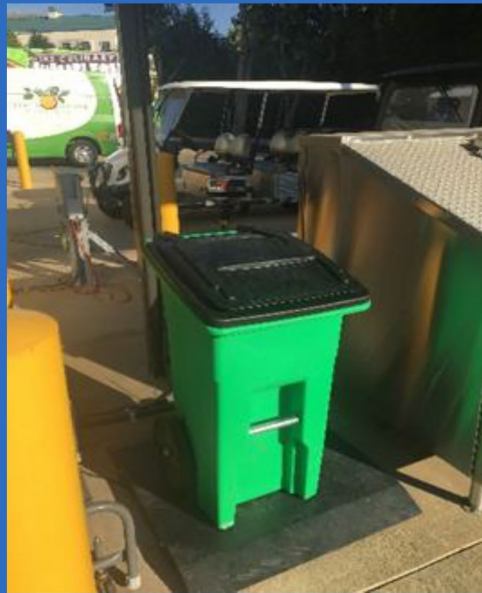
- ✓ Birds of Paradise
- ✓ Dead plants
- ✓ Flowers
- ✓ Grass clippings
- ✓ Leaves
- ✓ Prunings
- ✓ Shrub trimmings
- ✓ Small branches
- ✓ Tree trimmings
- ✓ Twigs
- ✓ Untreated wood
- ✓ Weeds

NO

- ✗ Animal waste
- ✗ Batteries
- ✗ Cactus
- ✗ Concrete
- ✗ Dirt
- ✗ Electronics
- ✗ Flammables
- ✗ Glass
- ✗ Hazardous waste
- ✗ Liquids
- ✗ Metal
- ✗ Plastic
- ✗ Rocks

Dining and food composting

FOOD RECOVERY CHALLENGE

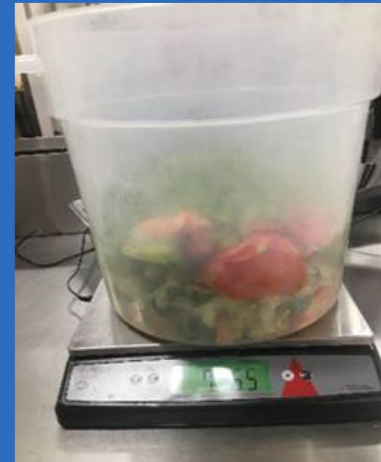


Dining and food composting

- Sent over 16,000lbs of safe and edible food to R’Pantry, Basic Needs, and Inland Harvest in FY 202223.
- Use plant-based, compostable food containers and “bioplastic” utensils and straws.
- Repurpose cooking oil from the dining halls into biofuel. SB 1383 tracks pre and post-consumer food waste on campus to help reduce waste in the future. Goal to reduce food waste by 25%.
- Prohibit the distribution of plastic bags campus facilities like the HUB, the bookstore, and convenience stores.
- Goal to eliminate single -use plastics from campus food facilities by July 1, 2024.

FOOD RECOVERY CHALLENGE

Our Goal:
Reduce Food Waste
by 20%



Putting Policy Into Action



Distributed over 16,300 lbs of safe and edible food to R'Pantry, Basic Needs, and Inland Harvest in 2022-23.



Plant-fiber based, compostable food containers and “bioplastic” utensils and straws. Goal to eliminate single-use plastics by 7/1/2024.



Cooking oil from the dining halls is repurposed and turned into biofuel. Utilizing SB 1383 to measure and track pre and post consumer food waste on campus to help reduce waste by 25%.



The distribution of plastic bags and food lids is prohibited in campus facilities like the HUB, The Bookstore, and convenience stores.

Bigbelly waste bins

- High-Capacity Stations (HC5)
- Modern waste management
- Compactors powered by solar panels
- Real-time collections notifications
- No overflows or visible waste
- Eliminates pilfering
- No windblown litter access for critters
- Increases recycling and composting
- Exhibits commitment to sustainability
- Maintains a cleaner campus and aesthetics

55

HC5 Units

28

Different Locations



Bigbelly on campus

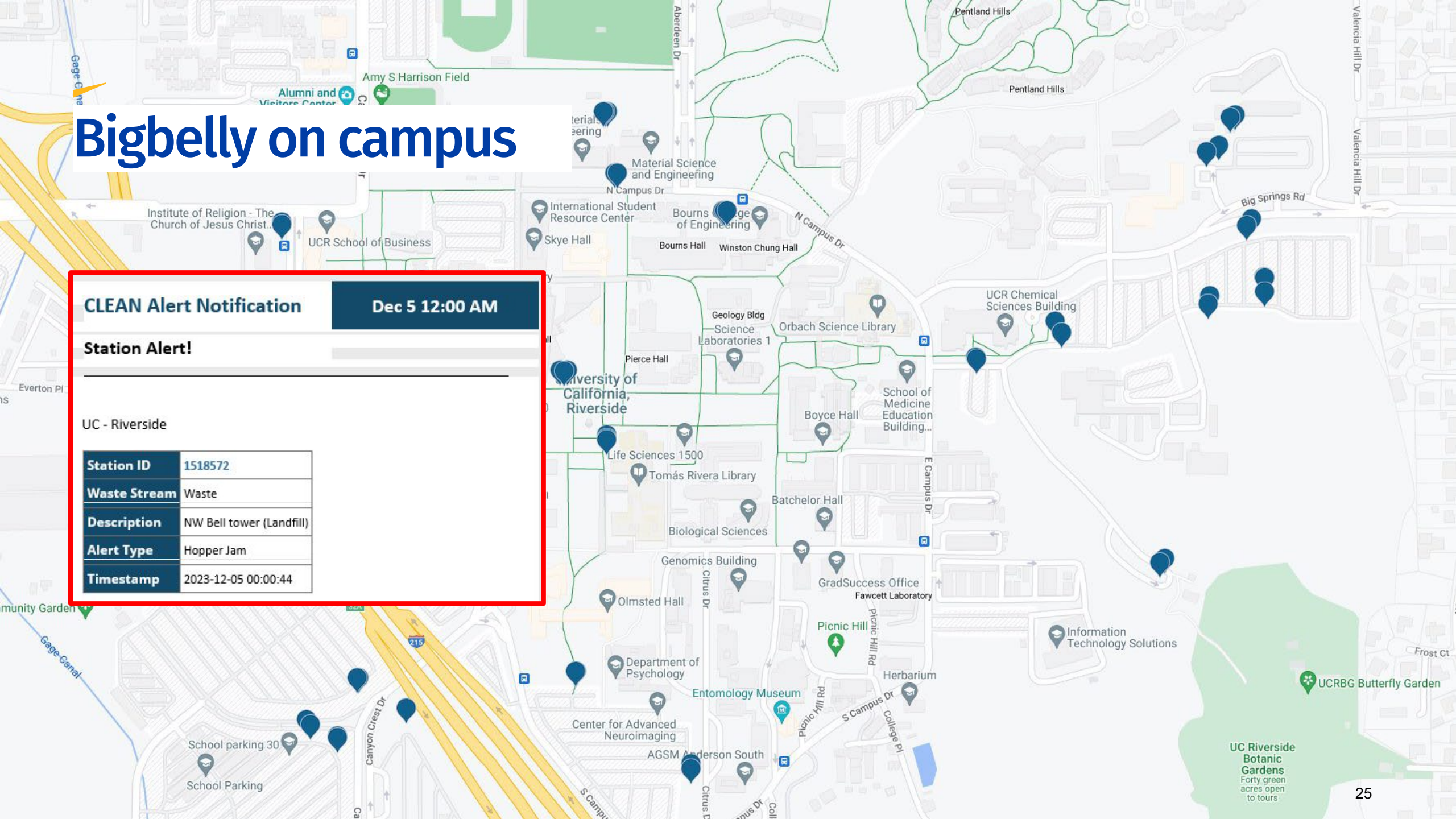
CLEAN Alert Notification

Dec 5 12:00 AM

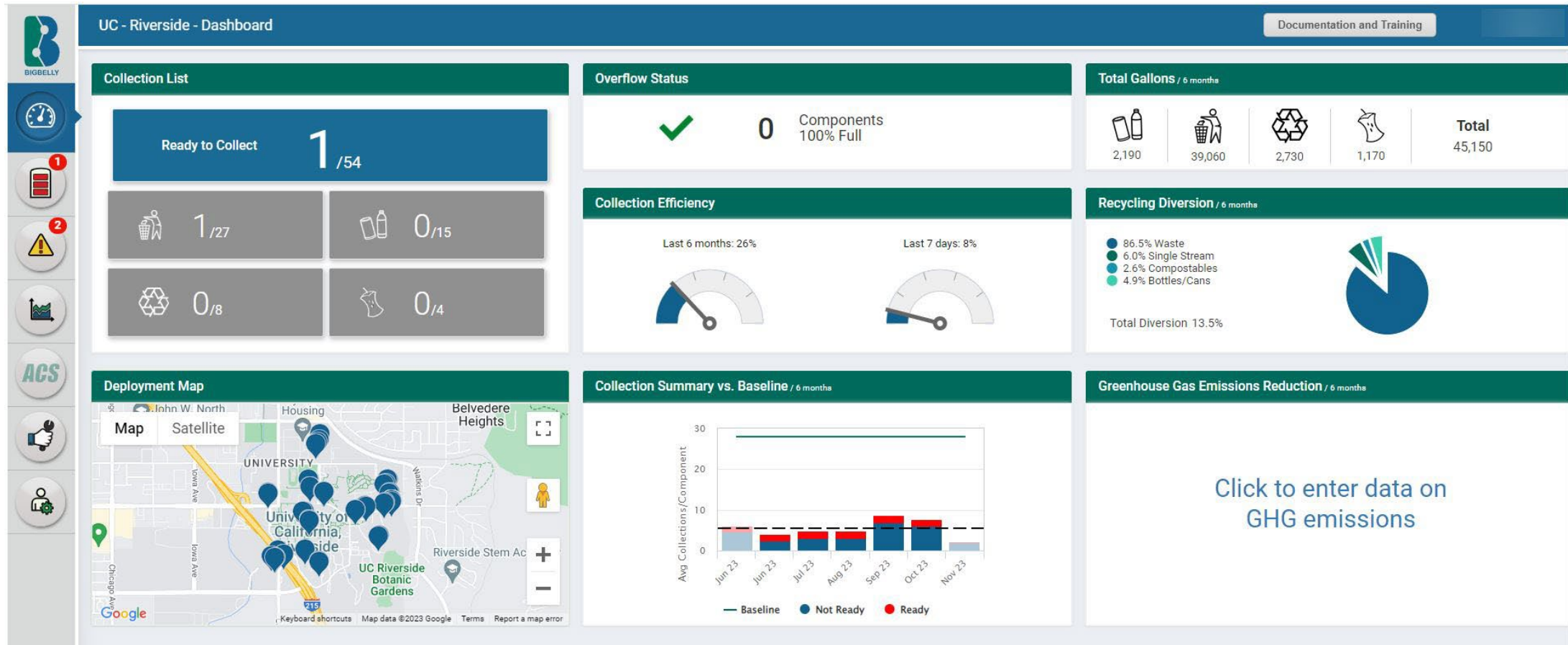
Station Alert!

UC - Riverside

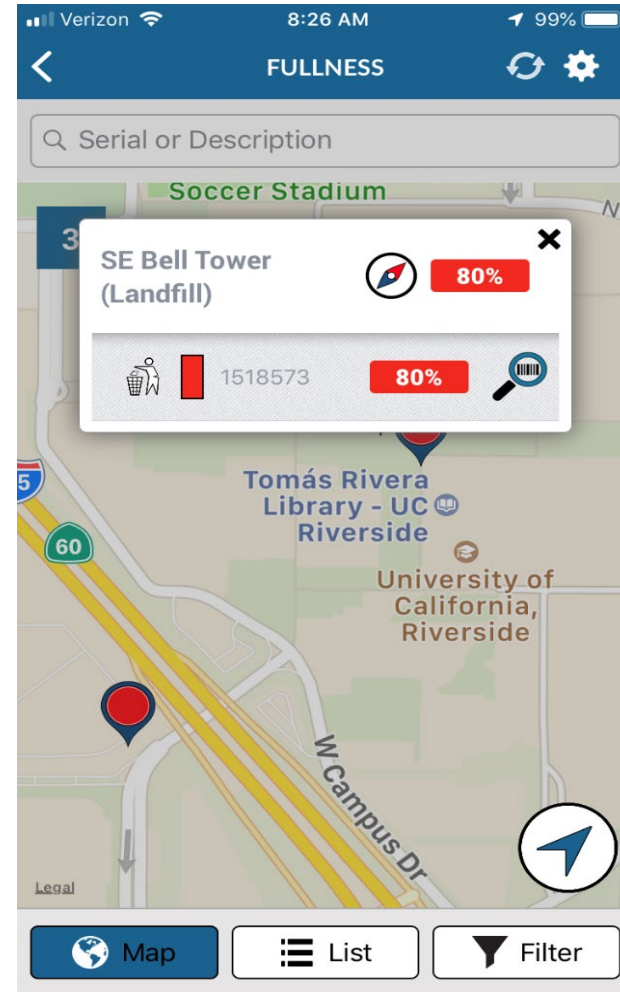
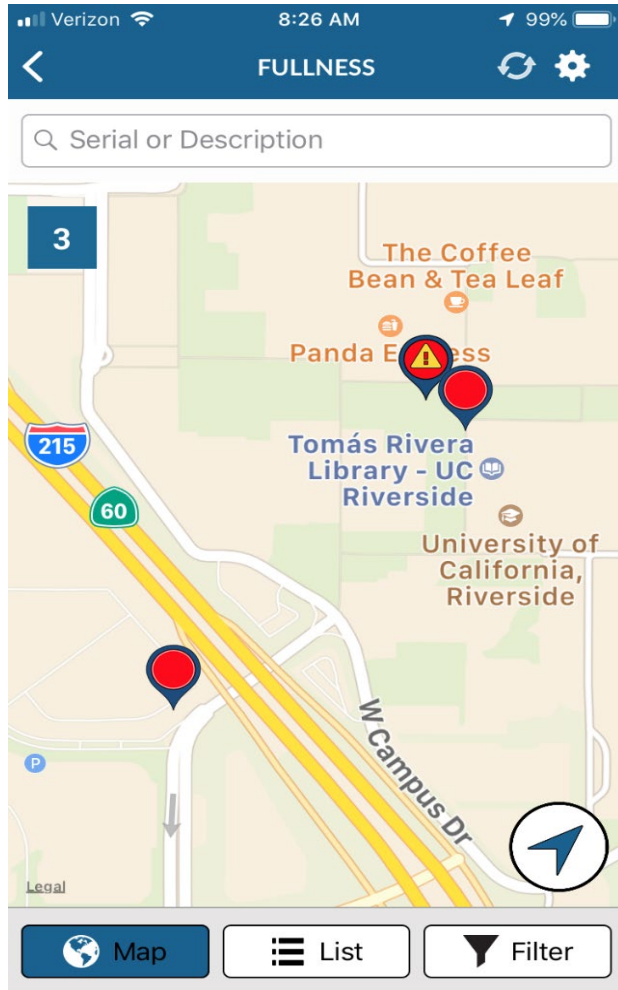
Station ID	1518572
Waste Stream	Waste
Description	NW Bell tower (Landfill)
Alert Type	Hopper Jam
Timestamp	2023-12-05 00:00:44



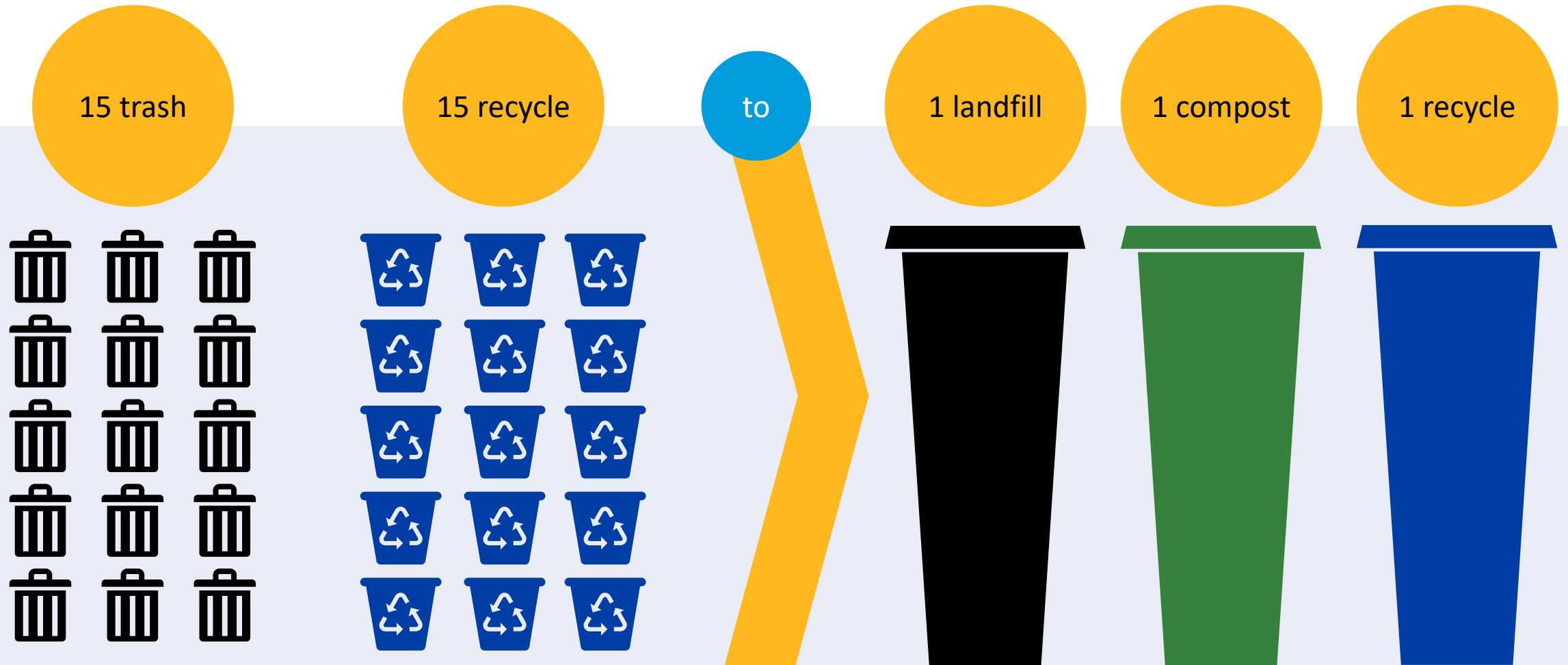
Bigbelly dashboard



Supervisor mobile application



Minimize waste. Maximize recycling and composting.



Centralized office waste bins

Calculating cost and efficiencies:

- 15 trash and recycle cans vs. 3
- 15 liners vs. 3
- 15 pick ups vs. 3

Reduces to 12 minutes per can instead of 15-30 minutes.



WELCOME TO UCR's ZERO WASTE

Help Keep UCR Sustainable!

The new centralized zero waste stations in your building will help our campus become more sustainable by promoting waste diversion awareness. Here is how to get started.



WHY ZERO WASTE?

Taking personal responsibility for waste generation and diversion from landfills will allow our staff to invest their time to clean for health. While custodians will no longer enter individual offices or work stations to empty deskside bins, they will continue to enter for all other services.

SELF-SERVICE INSTRUCTIONS

When your desk side containers are full, empty them into the centralized recycling, compost and landfill. Food or compostable packaging and used paper towels can be placed directly into the centralized compost bin.

Reduce. Reuse. Recycle. Compost.

As per the UC's policy to achieve zero waste, we are continuing to increase our overall waste diversion. Your support in using the guidelines below will allow UCR to achieve its sustainability goals.



Place chip bags, candy wrappers, wax or plastic lined cups, condiment packets, and non-compostable containers in your black bin.



Place food scraps, paper towels, napkins, UCR food containers and utensils in your green bin.



Place paper, cans, glass, and plastics in your blue bin.

THANK YOU FOR SUPPORTING WASTE DIVERSION!

For more information about the centralized zero waste stations, contact Facilities Services at facilities@ucr.edu.



Campus zero waste signage



How do I help?

- Follow signage and promote.
- Become a champion in your workspace. This limits landfill, accelerates recycling, and introduces composting at a local level.
- Getting up from your desk can burn 2 MET —metabolic equivalent task.



Contact information



facilities.ucr.edu



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