## Zero Waste Initiatives

**UCR Facilities Services** 

2025



## University of California, Riverside

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

### **No.** 1

In the U.S. for social mobility

-U.S. News & World report

### Top 1.3%

Of universities worldwide

-Center for World University Rankings

No. 1

For retention of Pell Grant first year students

-The Choice of Higher Education

No. 6

Public university

-Princeton Review Best Schools for Making a Public Impact



## **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, HVAC-R 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

mac &



### UCR's Waste Breakdown

Tons per year







Recycle

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
  - <u>Dining Services</u>
  - Housing Services
  - <u>R'Garden</u>
  - <u>GCAP</u>
  - UCR College Corps Fellows



### 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

2018-2019

2019-2020

Recycled

Organics

Tons

diversion rate is 50% UCR Historical Waste Data 80% 4000 70% 3500 3000 60% 
 50%
 \$02

 40%
 \$03

 Diversion Rate
 \$00
 2500 2000 1500 1000 20% 500 10% 0% 0

2020-2021

Landfill

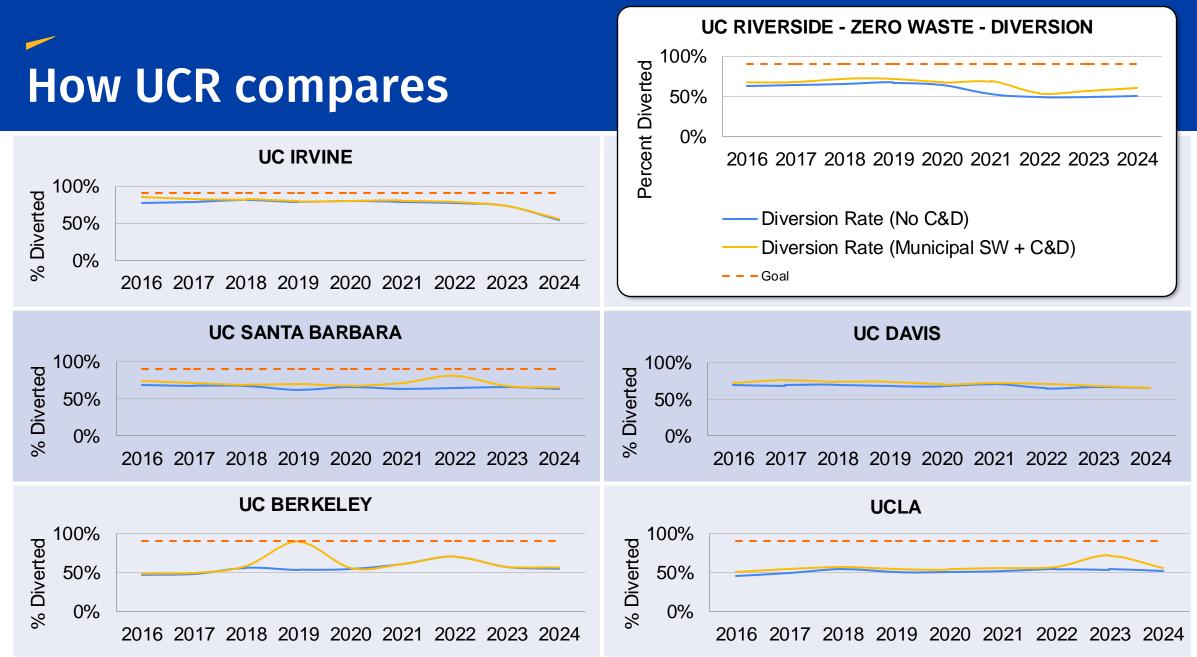
2021-2022

Total Related MSW — Diversion Rate

**UC RIVERSIDE** Facilities Services

UCR's current

2022-2023



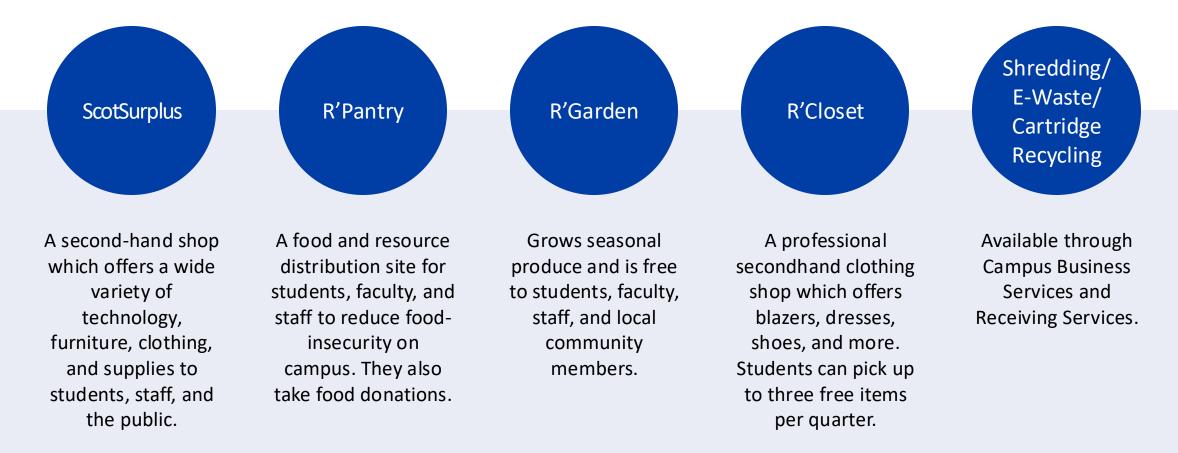
## UC sustainable practices

- 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 singleuse plastic beverage bottles with non-plastic alternatives.
- Install more water refill stations.



## Zero waste resources on campus





## Our next steps

- Increase outreach to campus community.
- 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.

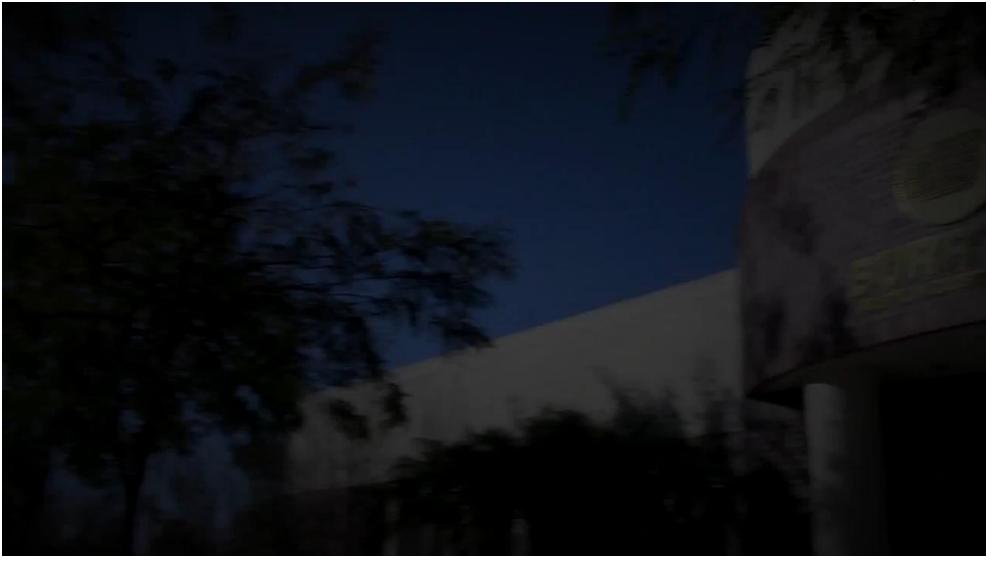




## **UC and Burrtec partnership**

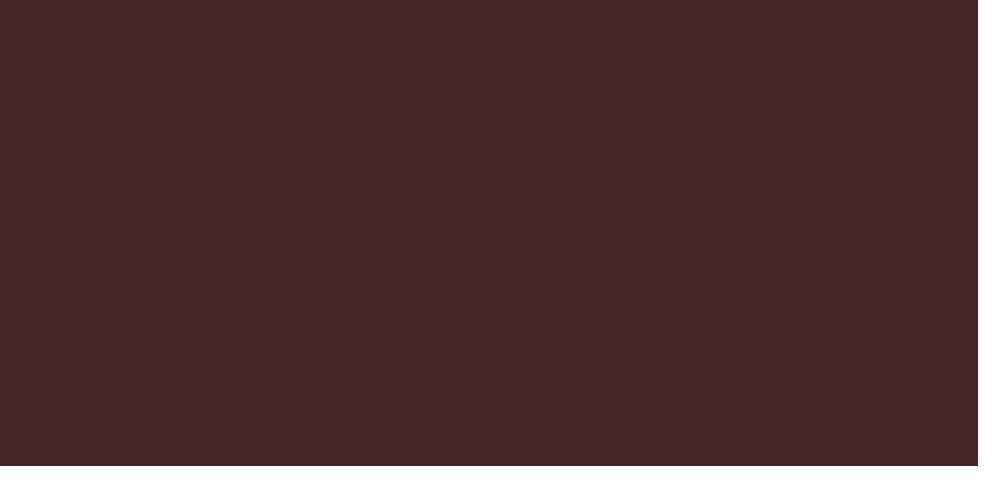


### Burrtec Industries Inc. — <u>material recovery</u>





## Burrtec Industries Inc. — <u>sustainable organics</u>





### 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 kandfills 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.





### Black/Gray Container is for trash

### **Blue Container** is for recyclables

### Green Container



#### DO NOT ADD HAZARDOUS WASTE

BLA

	ADD HALARDOOS WASTE	
ск/с	RAY CONTAINER GUIDE	
	YES	Γ
$\checkmark$	Clothing	
$\checkmark$	Digners	
$\checkmark$	Dishware	
$\checkmark$	Dishware Flower pots Hoses	
$\checkmark$	Hoses	
$\checkmark$	Plastic bags Pet waste	
$\checkmark$	Pet waste	
$\checkmark$	Plastic toys	
$\checkmark$	Plastic utensils	
$\checkmark$	Shrink wrap	
$\checkmark$	Straws	
$\checkmark$	Window glass	
$\checkmark$	Wipes	
	NO	
×	Batteries	
×	Electronic waste	
×	Hazardous waste	
×	Hot ashes	
×	Infectious waste	
×	Flammables	
×	Fluorescent bulbs	
×	Machinery	

× Paint

× Oil

× Sharps

× Tires

× Pesticides



#### 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

is fo	r green	was	te	
	STE ONLY SOLAMATOR		10	

### 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 recovery



Donated 10,458 lbs of surplus food to Inland Harvest in 2023-24

INTRODUCIN BROUGHT TOYOUBY UCR Din

Helped launch Scotty Eats program on 1/22/2025 to donate surplus food to UCR students. Distributed 53 lbs of food to 85 students at first event.

VERSIDE

## **Dining and food composting**

- Recycle cooking oil from the dining halls.
- Sent 3,239 tons of food waste to American Organics compost facility between 2009 – 2024.
- Track pre- and post-consumer food waste with goal to reduce food waste by 25%. In 2023-24, we saw a reduction of 33%.





## Dining and Single Use Plastics Policy

- Discontinued the distribution of plastic bags at campus facilities like the HUB, the bookstore, and convenience stores.
- Single Use Plastics Policy
  - 68% of beverage bottles eliminated Spring 2023 with introduction of Proud Source water.
  - There is no viable alternative to 20 oz plastic beverage bottles available from Pepsi for remaining beverages yet.
  - Conducted disposables audit to find compostable replacements for plastic food containers and accessory products. About half of items are already compostable.
  - Burrtec tested samples the compostable items and determined they cannot process most of the items.
- Challenges with SUP policy implementation:
  - Burrtec unable to process most compostable products in their composting system.
- Challenges with reusables:
  - Limited space and equipment
  - Theft/loss of items/customers fail to return them.



## Putting Policy Into Action



Donated over 10,458 lbs of safe and edible food to R'Pantry, Basic Needs, and Inland Harvest in 2023-24. 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.



## HUB Indoor Recycling Stations

- Three-stream waste, recycling and compost recycling stations that comply with SB 1383 requirements.
- 42 gallon capacity per container reduces disposal frequency and plastic liners used.
- Sign decals clearly displayed.
- Can be used indoors and outdoors. Dome lids prevent receptacles from filling with rain water.
- Economical solution \$520 per set vs other units costing more than \$4,000.





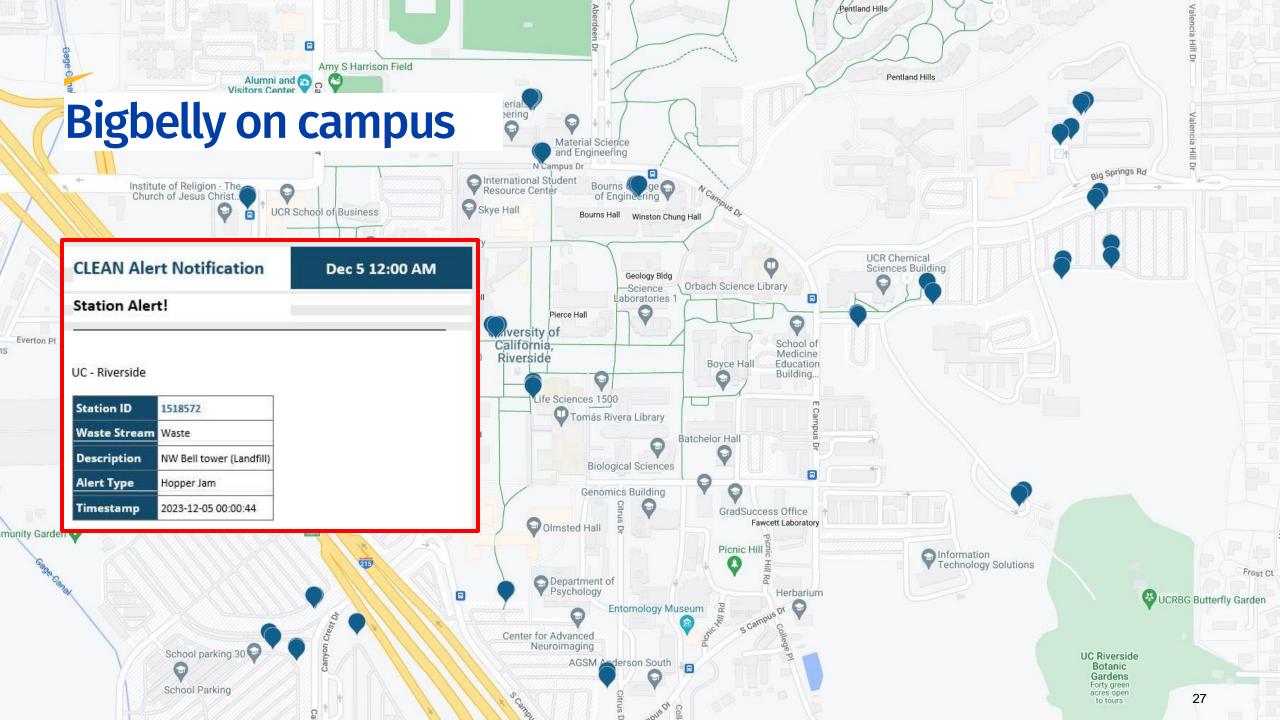
## **Bigbelly waste bins**

- 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

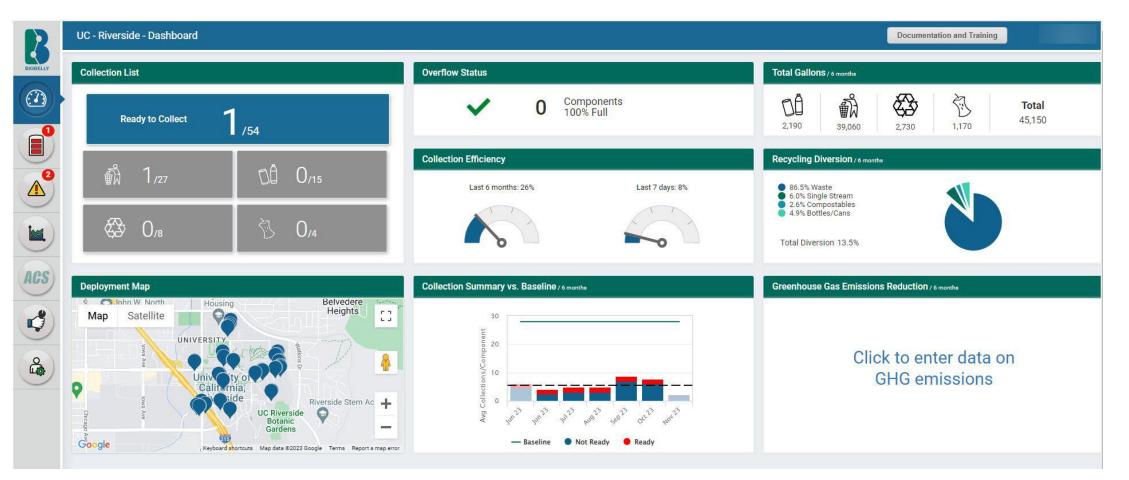
5829HC5 UnitsDifferent<br/>Locations





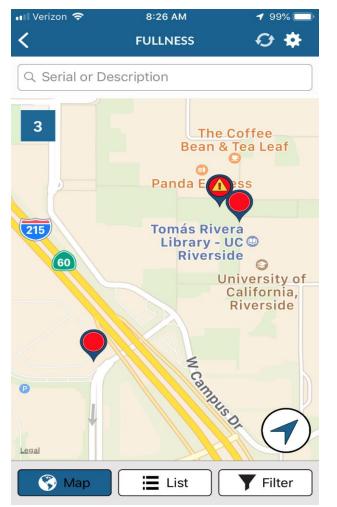


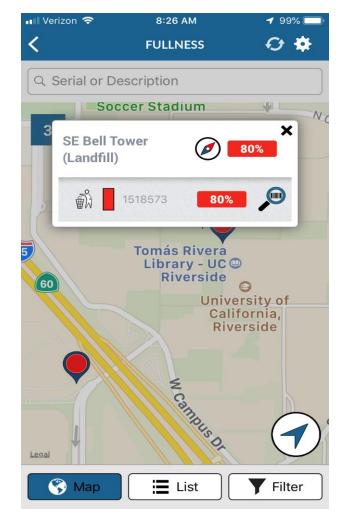
## **Bigbelly dashboard**





## Supervisor mobile application







## Minimize waste. Maximize recycling and composting.

15 Trash	15 Recycle	to	1 Landfill	1 Food Waste	1 Recycle
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### 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 1-2 minutes per can instead of 15-30 minutes.







### WELCOME TO UCR'S ZERO WASTE PROGRAM

#### HELP KEEP UCR SUSTAINABLE

The new centralized Zero Waste stations in your building are designed to promote waste diversion awareness.

#### WHY ZERO WASTE?

The goal of Zero Waste is to reduce landfill materials while increasing composting and recycling. This contributes to a cleaner environment.

As per UC's policy to achieve zero waste on all campuses, we continue to increase our overall waste diversion.

Your support in using the guidelines will allow UCR to achieve its sustainability goals.

#### WHAT'S CHANGING?

-

LANDRU

FOOD WASTE

RECYCLE

Custodians will focus on emptying these centralized bins and will no longer empty individual desk-side bins. This shift in responsibility for waste generation and diversion from landfills will allow our staff to invest their time in cleaning and performing other custodial services.

When your desk-side bin is full, empty it at your nearest centralized Zero Waste station. STOP. THINK. SORT your waste into the landfill, food waste, and recycle bins.

Need help on how to properly dispose of your waste? Refer to the backside of this sheet.

Thank you for supporting waste diversion. For more information about the centralized waste stations, contact <u>facilities@ucr.edu</u> or (951) 827-4214.



## 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.





### facilities.ucr.edu

Outdoor Bins: <u>toshio.ishida@ucr.edu</u> Indoor Bins: <u>aaron.uresti@ucr.edu</u>



Tos Ishida: (951) 827-4046 Aaron Uresti: (951) 827-3012

