Approved University Standards Indoor Bins and Signs for Recycling, Trash and Compost Last updated by Joe Abraham on 8-1-17

Introduction

This document presents proposed standards for indoor recycle, compost and trash bins and signs at Willamette University, and is the outcome of an ongoing collaboration involving Facilities Services, WU Sustainability Institute, students, The Green Fund, and the university standards committee. The aim of this document is to formalize university standards and best practices for bins and signs, and based on best practices, an assessment of indoor bins and signs across campus, and input from our waste hauler (Republic Services). A standardized system based on best practices can help improve awareness and engagement, positively affect behavior, reduce contamination, and improve the diversion of compostable and recyclable materials from the local waste incinerator.

This document was produced by the WU Sustainability Institute and Facilities Services, with input from Republic Services and Marion County Environmental Services.

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Language

"Zero Waste" refers to Willamette University's institutional initiative to not only reduce waste but more broadly increase creative reuse, recycling and composting, and in general reduce the volume of managed materials leaving the campus as waste, recyclables, compost, etc. Students and employees leading projects and programs aligned with these goals are encouraged to see their projects as supported by and part of this broader institutional initiative, and to refer to their projects as "zero waste initiatives."

"Stream(s)" refer to the movement of specific materials that arrive on campus, move through the university systems, are transferred to our waste hauler, and are incinerated, recycled, composted, etc. Examples include "trash," "compost," "cardboard," "hazardous waste," and "metals."

"<u>Lifecycle</u>" refers to all the stages of a material stream, from its production from raw material extraction, distribution, its intended use, and eventually to its recycling or disposal. By considering a material's lifecycle its possible to more fully understand its impacts on environmental and social systems.

"Upstream" refers to an examination of the lifecycle of a material leading up to when it becomes something the university must manage. By looking upstream, we can identify ways to reduce the amount of a material that we must manage. For example, Rather than focusing on greater recycling of single-use water bottles, we may focus on diminishing the volume bottles to recycle by increasing the availability of fountains that can accommodate a reusable bottle, and conduct awareness campaigns about the quality of our tap water.

"Downstream" refers to an examination of the lifecycle of a material once it leaves our campus. By looking downstream, we can better understand the impact of our practices and policies, and adjust them to avoid unintended environmental and social impacts. For example, ensuring our electronic waste (cell phones, printers, etc.) is properly processed helps avoid the release of heavy metals and other toxins into the environment, as well as their accumulation in (poorer) countries where e-waste from wealthier countries may be dumped.

"Contamination" occurs when one stream of materials is mixed with another stream in sufficient quantity for our waste hauler and others handlers 'downstream' to not be able to process it. Contaminated streams typically become trash. Standardized bin and signs, education and outreach, and proper individual behavior helps keep contamination to a minimum.

"Mixed Recycling" refers to our waste hauler's system of sorting most recyclable materials from a single bin, including paper and paper products, metals, and plastics. Other terms including "commingled" and "single-stream" are not to be used even though they refer to the same "mixed" recycling approach.

"<u>Paper</u>" includes Junk Mail, Gift Wrap and Greeting Cards (no Foil or Glitter), Magazines, Newspaper, Phone Books, Paperback Books, Shredded Paper in Paper Bags, and Cardboard Egg Cartons.

"Metal" includes tin and aluminum cans, aerosol cans, and most small scrap metal.

"Plastics" includes bottles, tubs, and trays. No caps, pumps, thin film, grocery bags, or wrapping.

"Cardboard" refers to corrugated cardboard, which is typically separated from "mixed recycling" because its dimensions are often too large to put inside mixed recycle bins or quickly fill them up. Cardboard doesn't contaminate mixed recycling, but our custodial staff are encouraged to put large dimension cardboard in outdoor containers only for cardboard that are provided by our waste hauler.

"Glass" recycling will not be supported on campus because glass contaminates mixed recycling, poses a potential threat to handlers of recycling material, and represents fewer environmental benefits relative to other recyclable materials. Efforts should be made to discourage the sale and use of disposable glass bottles on campus.

"Compost(able)" refers to materials that our waste hauler can break down into a soil amendment at their composting facility north of Corvallis. Currently that includes food scraps (pre- and post-consumer), organic landscape debris, and certified compostable containers and utensils that do not look like plastic. The label for the small green compost bin (see below) doesn't allow containers and utensils because many claim to be compostable but are not allowed by our waste hauler (see 'certified compostable' below).

"Certified compostable" only refers to items that are are "fiber based" (i.e., nothing resembling plastic) and that are certified by the Biodegradable Products Institute. Many plastic-like utensils and cups claim to be "compostable" but our waste hauler, Republic Services, has informed us that they no longer accept any plastic-like compostable items because they are not breaking down in their system. The only exception to BPI-certified fiber-based compostable items are BPI-certified compostable bin liners.

"Biodegradable" is an ambiguous term, and is not to be used or confused with "(certified) compostable."

"<u>Landfill</u>" is a term not to be used in any communications since virtually all of Willamette University's trash is incinerated at a waste-to-energy facility near Brooks, about ten miles north of Salem.

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¹ http://www.oregon.gov/deq/FilterDocs/2050-MaterialRecovery.pdf

Color

Consistent use of color is important for clear visual communication. The colors below reflect best practices, are used in our community by our waste hauler, and conform to the visual identity style guide maintained by University Communications. Colors and their designated use must be consistently applied to all visual communications including signs, bins, and all other print or digital media.



MIXED RECYCLING AND CARDBOARD

Dark blue: c100 m67 y0 k23 / RGB: 0/75/141 / Pantone 288 Bins, signs, and any labels for mixed recycling, and cardboard should use

this color.



COMPOST

Green: c58 m22 y91 k4 / RGB: 121/156/75 / Pantone 576 Composting bins, signs, and labels should use this color.



TRASH

Black is the preferred color for trash bins, labels, and any posters. Many existing trash bins are tan or grey, however, and should be tolerated until there are resources to replace with black bins.



"NO" AND "DO NOT" MESSAGES

Light Cardinal: c0 m100 y63 k12 / RGB: 211/18/69 / Pantone 200 Only used for messages on signs and bins about what is not recyclable, not compostable, and what does not go in specific bins.

Indoor Bins, Signs, and Labels

Mixed Recycling

Mixed recycling bins at Willamette University should only include the blue bins immediately below, paired with a black trash can whenever possible, either immediately next to each other or as close as possible.





From small to large above: "office recycle bin," "slim jim" and "blue roller cart." This image does not include a 40-quart office bin that may be used as well. Office bins are to be used primarily for individual offices and work stations, but can also be used in common areas where slim jims and roller carts are too large. Slim Jim's are to be used in common areas, and roller bins are to be used primarily in 'back of the house' areas except for short periods when volume increases. Office bins and slim jims are obtained from SupplyWorks, and blue roller carts are obtained through our waste hauler, Republic Services.

Recycle Away's "Kaleidoscope" bin. These metal bins are installed in several buildings as "stations" that include black trash, and blue mixed recycling bins. Kaleidoscope bins are too expensive to use campus-wide (approximately \$700/set). As a durable and good-looking bin the university should use these as long as possible. Mixed bins should only have a square opening in the lid (unlike the picture above).

The following lids should NOT be used on mixed recycling bins:



A slot lid suggests recycle bin is only for paper and not for aluminum cans, plastic bottles, etc.



A round hole lid makes it difficult to accept longer dimension materials, and suggests glass is accepted.



Mixed slot/hole bins suggests mixed recycling is only bottles, cans, and paper.



"No corrugated cardboard" and "no glass" labels (see below) can be applied to mixed recycling bins where cardboard regularly fills up the bin. Mixed recycling and signs instruct flattening and neatly stacking corrugated cardboard next to bin.



Signs should placed at eye level and immediately above bins, and in view of as much common space as possible. Signs should be laminated and affixed to walls with 3M double sided "command strips." In some cases the sign can be affixed directly to the side of the bin (e.g., bins that are frequently moved around by occupants).

NO CORRUGATED CARDBOARD

This label, measuring 8" x 1.5" was created for the purpose of helping avoid mixed recycling bins filled with corrugated cardboard of large dimensions. Cardboard should be flattened and neatly stacked next to blue mixed recycling bin.

Glass

Willamette University will not support glass recycling because glass contaminates mixed recycling, poses a potential threat to handlers of recycling material, and represents fewer environmental benefits relative to other recyclable materials.² Efforts should be made to discourage the sale and use of disposable glass bottles on campus.



This label, measuring 8" x 1.5" was created for the purpose of helping avoid glass contaminating mixed recycling bins. Glass should be thrown away in trash bins.

Cardboard

Corrugated cardboard, especially larger dimensions, will quickly fill up a mixed recycling bin, even when flattened or folded. Cardboard should be folded and neatly stacked next to mixed recycle bins where custodial staff can transfer to larger containers outside.

Where helpful, use "No Corrugated Cardboard" stickers on mixed recycling bins to discourage individuals stuffing slim jims and blue roller bins with corrugated cardboard (see mixed recycling section above).

Trash

Trash bins should ideally be black, but many are also tan and grey. Trash bins and lids should not be any other color, and especially not blue, green, or red. "Trash Only" labels can be applied to trash bins as appropriate. Trash bins should be paired with a mixed recycling bin whenever possible to provide convenient options for properly disposing of recyclable items.

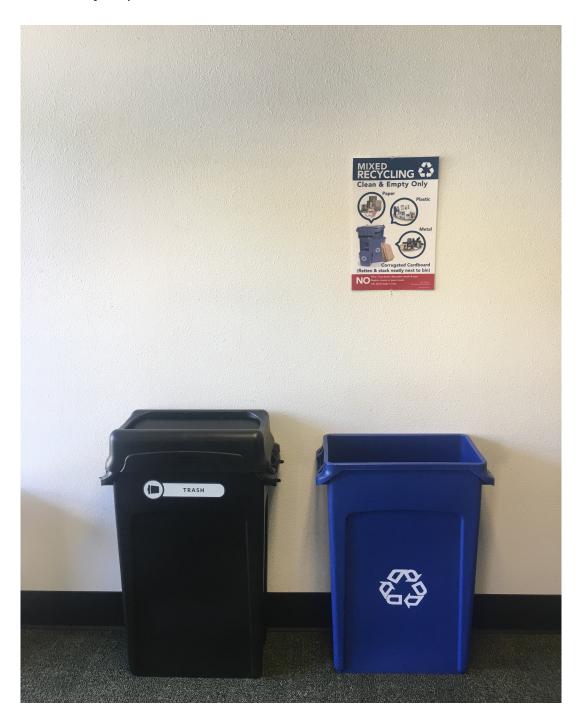


This label, measuring $8" \times 1.5"$, was created for the purpose of identifying trash bins and contrasting with adjacent recycling bins.

² http://www.oregon.gov/deq/FilterDocs/2050-MaterialRecovery.pdf

Standard Recycle and Trash Bin Setup

The Implementation of these standards begins with the setup of bins and signs as illustrated below. This setup includes (at least) one blue recycle bin, one black trash can (with lid), and one laminated mixed recycling sign, affixed to the wall at eye-level. This 'default' setup will need to be adapted as some areas in our buildings may not include all the space necessary, the volume of materials collected may require different sized and/or additional bins, etc.



Compost

Currently, bins for disposing compostable items are available for in residence halls (upon request and in agreement with Housing & Community Life) and in the Bistro. Bins should be lined with BPI-certified compostable liners. Contact Facilities Services to source these liners.



Compost bins used in offices and residence halls should resemble the bin above, and include a charcoal filter. Bin liners must be certified compostable by the Biodegradable Product Institute.



Compost bins should be accompanied by signs where possible. Signs should be laminated and affixed to walls nearby bins with 3M double sided "command strips."

Procurement

Contact Facilities Services for laminated signs (<recycle-request>). Signs can also be downloaded from www.willamette.edu/go/recycle, printed and cut at WU Print Services and laminated at WITS production. Signs must always be printed in color, laminated, and affixed to walls with 3M double sided "command strips" or blue tape affixed to the back of the sign.

Mixed Recycling Bins

Contact Facilities Services regarding the (re)placement of recycle bins (<recycle-request>).

Compost Bins

Small green compost bins, like the one pictured above, can be purchased from a number of online retailers for about \$20. Regardless, bins must be green, of similar size but large enough for the compost label to be applied, ideally include a charcoal filter, and used with BPI-certified compostable liners.

Compostable Bin Liners

Contact Facilities Services regarding the sourcing of BPI-certified compost bin liners (<recycle-request>). You may identify a BPI-certified liner and a source by visiting bpiworld.org. Use of non-BPI certified liners will result in the contamination of the composting system.

Trash Bins

Contact Facilities Services regarding the (re)placement of trash bins (<recycle-request>).

Labels

Labels were created by Joe Abraham (Sustainability Institute) and printed by stickerrobot.com. Contact Joe Abraham and/or Facilities Services to obtain labels.