



Background

In 2019, recycling market shifts led to the decision by City of Eugene to exclude specific materials from its recycling program due to the economics of recycling certain materials at that time. Materials removed from the program included plastic tubs, plastic jugs, and shredded paper. The items that remain on Eugene's list of accepted materials include paper, cardboard, tin and aluminum cans, transparent soda bottles, water bottles, milk jugs, and juice bottles.

Resident response to the removal of plastic tubs and jugs from curbside commingled collection has been robust. Program staff receive calls once monthly or more from residents that are frustrated with the lack of local recycling options for these items and/or who are storing them in anticipation of an opportunity to recycle them in the future. In many cases, these conversations also reveal that other items (plastic clamshell and takeout containers and other rigid plastic items like flowerpots) that have never been accepted into the City's commingled recycling program are still commonly thought to be recyclable among residents.

Eugene Residents and Recycling

To improve awareness and understanding of Eugene's existing recycling program within the community, a public education campaign is currently underway to determine the most effective way to reduce confusion around Eugene's recycling program while simultaneously anticipating how best to communicate future changes to recycling programs related to Oregon's Plastic Pollution and Recycling Modernization Act (Senate Bill 582).

Focus Groups

The City has contracted recent qualitative research designed to explore the knowledge and motivations of Eugene residents related to recycling locally. Three focus groups were conducted in February of 2022 including single-family homeowners, renters of both multifamily and single-family residences, and Spanish speaking residents.

Residents in all groups expressed a high level of awareness about recycling in general and an understanding of the importance of recycling correctly, and also understood that there were impacts associated with putting the wrong items in their recycling.

Focus group members reported being motivated to recycle by environmental concerns, the safety of workers processing recycled material, and the idea that recycling service could potentially be limited or made less accessible by service providers due to contamination issues, leading many to report that they would throw an item away if they were unsure it could be recycled.

Participants reported they were most confused when recycling different kinds of plastics, and nearly all participants were unclear which items made from plastics could be recycled. In some cases, focus group members were aware of the resin identification numbers on plastic

containers and routinely looked for them when recycling despite Eugene's recycling program accepting plastics based on shape and visual characteristics and not resin type.

Residents reported not being aware that guidelines vary from locality to locality and that they rely on recycling information that they acquired a while ago, sometimes even in different cities or states. Many interviewees also expressed frustration about how rules may vary from place to place and indicated that they would not spend significant amounts of time researching information when unsure about what to do with a specific item.

Public Outreach

While performing public education and outreach around recycling at community events, City of Eugene Waste Prevention staff routinely encounter a lack of clarity about what can be recycled even among residents that describe themselves as environmentally minded and up to date on recycling information.

One of the methods of educational outreach employed by the Waste Prevention team is a recycling 'game' where participants use trash pickers to select materials from a mixed pile of common household trash and recycling materials and then place them into staged trash, recycling, and yard + food waste 'bins'. In addition to being educational and very popular with families, the staff delivering the game have reported the most common items that residents consistently misidentify as recycling as:

- Plastic clamshell containers
- Plastic to-go containers
- Plastic tubs and jugs not accepted into the current recycling program
- Rigid plastic items such as flowerpots
- Frozen food boxes

Resident Communications

When responding to resident inquiries related to recycling, the majority of resident calls (6 out of an average of 7 calls weekly) are requests for information about where to recycle items that are too large to fit in their curbside commingled bin (large volumes of cardboard), or that are not accepted into the recycling program (tubs and jugs).

Contamination

Data on the level of contamination in Eugene's commingled recycling stream isn't readily available but during observation by Waste prevention staff of local commercial and residential recycling route loads being aggregated at a local materials recovery facility, contamination is obvious and significant. Plastic film, rigid plastics including clamshell and takeout containers, and single use items such as coffee/hot cups are prevalent.

Recycling Contamination Measured at Public City Facilities

The City's Internal Zero Waste Program staff works with assigned recycling coordinators at City operated facilities to ensure that recycling signage is posted and up to date in both public and

restricted areas, monitors internal and external trash and recycling for volume and recycling contamination, and works with an external third-party contractor to perform waste assessments at these facilities.

In 2017, a waste assessment performed on a City operated pool/community center with publicly accessible trash and recycling collection points reported a 40% contamination rate in the exterior recycling container. After the 2019 changes to Eugene's recycling program, contamination observed during a waste assessment at a different but similarly sized pool/community center was 37% of the total material in the exterior recycling containers. In both assessments, the contamination was comprised of rigid plastic, compostable food, and items suitable for donation.

Recommendation

Although the removal of several items from Eugene's recycling program simplified the program's list of accepted materials, no direct evidence that the exclusion of shredded paper and several categories of plastics has significantly reduced commingled contamination of the local recycling stream overall has been observed.

Eugene made alterations to the list of accepted materials in the City's recycling program due to market forces that may no longer be as relevant as we anticipate the contribution of resources from producers potentially increasing the feasibility of recycling a broader range of materials. A final list of commonly recycled items that included more categories of material (clamshell containers, tubs, jugs, flower pots and other rigid plastic products) than are currently included in Eugene's commingled curbside recycling program would align better with existing resident recycling habits while possibly allowing for more targeted public outreach and education focusing on eliminating the most problematic items (plastic film, etc.) from commingled recycling streams.