



Greek Life: Creating a Waste Reduction Plan and Educating the Residents in Sorority Living Quarters

Kaylee Rice

Dale Bumpers College of Agricultural, Food and Life Sciences



The Purpose

Greek Life lacks a solid infrastructure when it comes to sustainable initiatives throughout the sororities. I am a member of Kappa Delta sorority on the University of Arkansas's campus. My sorority house did not recycle or place any emphasis on waste reduction. Recycling was not provided for residents of the house and about 1,000 cups of Styrofoam were discarded a week. I wanted to increase awareness of the environment and create a waste reduction plan for my sorority.

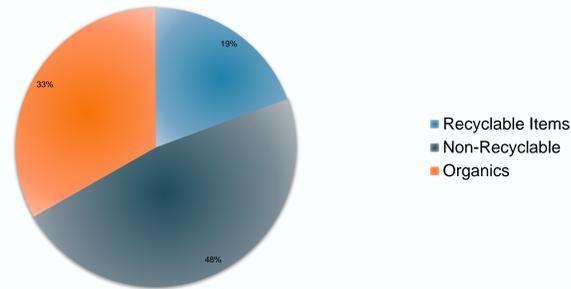


Figure 1. The City of Fayetteville provides two green bins and allows a 3ft x 3ft pile of cardboard for residents to recycle once a week.

The Project

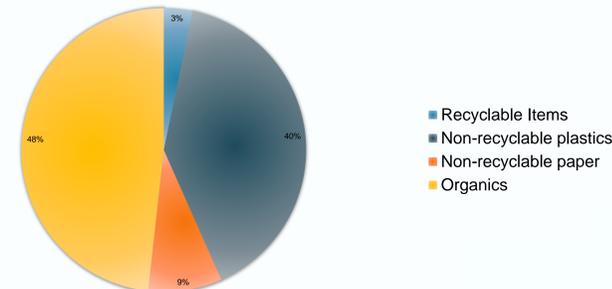
A preliminary waste audit quantified the total waste stream to identify possible waste diversion. Waste reduction possibilities were assessed from the waste audit and found that a three-phase reduction plan would make the most impact. The first phase, incorporated an easy to use recycling program in the house (Figure 1). Second, compost organic waste through a local organization within the city of Fayetteville. Lastly, create a fund to finance any future sustainable initiatives within the house. Throughout the projects duration, many opportunities were used as a tool for educational outreach to the members.

Contents of the Waste Stream: Pre-waste Audit



Graph 1. Results of the pre-waste audit. Non-recyclables were found to be the most prominent waste.

Contents of the Waste Stream: Post-waste Audit



Graph 2. This graph depicts the post waste audit results after incorporation of the waste reduction plan.



Figure 2. For the waste audit, waste was divided into two trash cans. The "food" trash can was weighed to get an organics weight. The "everything else" can was further sorted and then weighed.

Methods

The waste audit created an inventory for the waste stream and a waste reduction plan was generated from that information. Trashcans allowed for easy food and waste separation for house residents (Figure 2). Waste was then sorted into four groups: recyclables, non-recyclable plastics, non-recyclable paper, and organics (Figure 3). These groups were further broken down and then weights were taken for the respective groups. Finding percentages of the waste stream highlighted the greatest waste diversion needs (Graph 1).

The Outcome

Through the waste reduction plan, an overall 16% drop in the amount of recyclable materials was diverted from the waste stream (Graph 2). This was apparent through resident attitudes toward the environment and sustainability as a whole. Educational outreach presentations were used to teach chapter members how to use the recycling system. Many expressed a heightened awareness of waste through the myriad of activities my experiment provided for members.



Figure 3. Volunteers further sorted the waste by dividing it into three main groups: recyclable, non-recyclable plastics, non-recyclable paper, and organics.

Sustainability

Managed Systems Supporting the City of Fayetteville through purchasing their recycling services intensified consumer awareness. This leads to increased revenue for the recycling services due to increased awareness on campus that will hopefully spread throughout Greek life.

Built Systems Waste audits and recycling improves the functionality of Kappa Delta Sororities resident building. Continually tracking the waste stream and furthering sustainable initiatives will ultimately lessen the impact the sorority house has on the environment.

Social Systems Residents saw a significant increase in social awareness of the environment through educational outreach pertaining to the waste audit. The waste audit brought to light individuals wasteful eating habits at meal times and provided a quantifiable sense of the amount of food waste being discarded. Through community accountability members of the sorority relied on one another to reduce waste as much as possible.

Natural System Reducing the amount of waste going into the landfill and ultimately reusing recyclable goods decreases overall impact on the environment. Decreasing the waste stream lowers the amount of landfill space or incineration energy needed to dispose of trash. Recycling of goods allows for reduction in the extraction of viable resources on earth.

Acknowledgements

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