

# Amsterdam Free Library Waste Audit Report

July 19, 2018

A waste audit is an analysis of a building / organization's waste & recycling efforts. There are several benefits that can result with the information gained from sorting through the garbage.

- Waste prevention – was something thrown away that could still be used by the organization or donated & continue to be used for its original purpose?
- Source reduction – is the materials in the trash excess material that should not have been used in the first place. Can you use less of it?
- Reuse – can an item in the trash be used again or used for a new purpose?
- Recycle – is an item in the trash not being recycled? Could it be recycled?
- Organic material – what portion of the waste stream could be diverted from landfill & turned into compost?
- What items are deposit containers of value?
- What items in the trash could be purchased with more recycled content so they are less wasteful to begin with?

## Library's set-up of Containers on Feb 1, 2018

Main floor	Trash	Recycling
Kitchen	1- trash bin	1 – recycling paper bag
Behind desk	1 – trash bin	1 – recycling paper bag
Copier	1 – trash bin	1 – paper bin only
Computer room	1 – trash bin	No recycling containers
Water cooler	1 – trash bin	No recycling containers
Reading room	No trash bin	No recycling containers
Extension	1- trash bin	1- paper bin only
Nicole Office	1 -trash bin	No recycling bin
Staff Office	1 – trash bin	No recycling bin

Main floor bathrooms		
Handicap	1 – trash bin	No recycling containers
Regular	1 – trash bin	No recycling containers

Children & Teen's room		
Librarians counter	2 – trash bins	1 – paper bag

Side entrance		
By door	60 gallons – trash bin	Cart for paper only

Outside		
By front door	Large metal trash can	No recycling containers

**Waste Audit Team:** The waste audit was conducted on February 1, 2018. by a coalition and including Grow Amsterdam NY - Tom & Bernadette Twente, Schoharie River Center - Environmental Study Team Educator Scott Hadam and 2 students Friends of the Library–Rosemary Barger and Catherine Cross Master Composter & Recycler Caitlin Owens representing Schenectady Recycles

**Process:** Bernadette led an orientation on the purpose and how to of the waste audit. The team split up into small groups and used worksheets to make notations about the samples collected. All the bags were taken to the maker room for processing. In addition, there was trash and recycling previously collected by the libraries custodian. There were 5 bags of trash and 7 bags of recycling collected for sorting. The items were sorted according to the City of Amsterdam Recycling Guidelines. The categories were trash, compost, reusable items, film, single stream recycling (paper & plastic containers) empty collection bags and deposit containers.

What	Main Content
<b>Trash:</b> Any item that cannot be recycled	Coffee cups, paper towels and Styrofoam packaging
<b>Compost:</b> Food scraps	Coffee grounds, banana peel & leftovers thrown away including sandwiches & pizza
<b>Reusable:</b> Items that can still function farther intended use or be repurposed	A hole puncher, bookmark, lanyard, Christmas ornaments, ribbon and library card.
<b>Film:</b> stretchable wrapping & packaging, grocery bags accepted collection at Supermarkets and Big box stores	Grocery bags and some packaging
<b>Single stream recyclables:</b> All recyclables paper products & plastic tubs and containers	Paper from old books, printer and copier By weight a small amount was plastic that were recyclable
<b>Deposit containers:</b> Containers with 5 cents deposit in NYS	Lots of single use water bottles.

**Waste Audit Data:** The team collected 5 bags of trash and there were 7 bags of recycled content. The bags were weighed using a luggage scale.

Percentage of Content	Categorize	Weight lbs.
56%	Trash	24.92
15%	Compost	6.60
15%	Reusables	6.56
2%	Film	1.04
11%	Single stream	4.66
1%	Empty bags	.56
-----	Deposit containers *	Not weighed
100%	Total	44.34

The unsorted percentage of trash is the sum of trash + compost + reusable items + film totaling 88% trash (39.12 lbs.). **32% (14.2 lbs.) of this content should have been diverted from the landfill.**

**Summary of Waste Audit on Feb 1<sup>st</sup>:** Most of the trash stream was paper towels from the bathrooms and Styrofoam packaging. Compostable items were a significant portion (15%). Coffee cups were also a notable part of the trash stream.

**Recommendations:** The collection system needs better placement of designated recycling & trash containers in the public spaces. A home for items not currently collected needs to be established. It makes sense to add compost collection in the kitchen. The placement of receptacles for reusable items & film also needs to be established. Coordinating signage should also be installed.

In the basement there should be a dedicated space where all trash & recycling cans be brought to. This location should have a place to put each item the library collects, in its own container. Dedicated signage would explain what those items are & how to sort them.

In conjunction with focused placement of trash & recycling containers, staff education is a key component. A brief training session is recommended for the staff. A brief workshop for library participants and community members would also be beneficial.

### **General recommendations**

- Use reusable cutlery, cups, and dishes at small events
- Compost food scraps
- Separate plastic film for recycling
- Encourage the use of reusable water bottles and travel cups among staff and patrons
- Provide shedder for copier station or container for shredder service
- Upgrade bathroom facilities to air hand dryers
- Save unused items for donation or use in Arts & Crafts room.
- Return deposit containers for cash

**Organic matter:** Compost collection could be implemented in the kitchen. 3 to 5-gallon bucket with screw top lid with signage listing what can go in the compost bucket. Full buckets would need to be transported off-site for composting; or the library could purchase a compost tumbler to compost on-site. This collection program should be run by volunteers and overseen by a staff member.

**Proposed Collection Locations:**

<b>Main floor</b>	<b>Trash</b>	<b>Recycling</b>
Kitchen	1- small trash bin	1 – small blue recycling bin and 3-gallon compost bucket
Behind desk	1 – trash bin	1 – paper only bin
Copier	No trash bin	1 – large slot paper bin only
Computer room	1 – small trash bin	1 – slot paper bin and 1 deposit bin
Water cooler	1 – trash bin	1 – small blue recycle bin
Reading room	No trash bin	No recycling containers
Extension	No trash bin	No recycling containers
Nicole Office	1 -trash bin	1 – small blue recycling bin
Staff Office	1 – trash bin	1 – small blue recycling bin

<b>Main floor bathrooms</b>		
Handicap	1 – trash bin	No recycling containers
Regular	1 – trash bin	No recycling containers

<b>Children &amp; Teen’s room</b>		
Librarians counter	1 small trash bin	1 – slot paper only bin and small blue recycle bin

<b>Side entrance</b>		
By door	60 gallons – trash bin	1-large slot paper bin only

<b>Outside</b>		
By front door	Large metal trash can	1 large deposit bin

This reports' recommendations should be a reviewed by the Library Director with input from the custodian & staff. Specifically, the location & placement of trash & recycling containers should be looked at with an eye towards adding containers in new locations, and where to provide containers for items not currently recycled.

A census of existing containers should be made along with containers Grow Amsterdam NY can provide. Then a proposal to supply containers not on hand can be presented for funding.

As the location of collected items are established, signage can be developed and printed to coordinate the new trash & recycling program.

**Future steps:** A follow-up waste audit in 6 months is advised to gauge the degree to which the program recommendations have been successfully implemented.

Further refining and promotion of environmentally sustainable practices would include the review of current products the library purchases & the development of a procurement policy that favors items with recycled content.

The library could become a host site for the collection of recyclable items not currently collected by the City of Amsterdam Juice pouches, candy wrappers and batteries are a few of the things that can be collected and recycled.

Undertake an environmental review that evaluates energy consumption & procurement. Perhaps undated HVAC equipment & better insulation & weather sealing would reduce energy usage along with self-dimming lights or automated shades that block heat from the sun. It may be feasible for the library to purchase energy from a 3<sup>rd</sup> party provider that sources their production from solar or wind power. Long term, the library might deploy its own photovoltaic collection system.