HUDSON RIVER PK
RIVER PROJECT

Waste Report 2022

Waste Audit and Community Compost Program

Purpose

Since 2019, Hudson River Park (the Park) has been committed to its Park Over Plastic initiative, which is designed to reduce single-use plastics and educate the community about plastic pollution. The Park has taken many steps to improve and encourage proper recycling throughout its bounds, including increasing the number of waste bins and strategically pairing trash and recycle bins with signage. To determine the effectiveness of these waste management methods, a yearly Waste Audit is conducted. In addition to plastic waste, the Park composts food scraps and horticulture waste to further its sustainability goals. Hudson River Park's Community Compost Program welcomes food scraps from local residents at 10 drop-off locations throughout the Park which are then processed into compost and distributed to plant beds. The purpose of this report is to share findings from the Park's waste metrics and provide data to inform day-to-day operational strategies and sustainability measures.

Project Goals

- Operate and maintain 10 community compost drop-off sites.
- Process food scraps and horticulture waste into compost to support plant health and Park sustainability.
- Manage over 100 landfill and recycling bins.
- Streamline waste metrics, increase recycling, and improve waste management capacity.
- Engage and educate the community through programs, resources, and volunteer opportunities.

Fig. 1 | Community member utilizing updated food scrap drop-off bins installed in 2022.

Fig. 2 | Hudson River Park staff perform waste audit by analyzing contamination in landfill and recycling bags.

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Waste Audit Methods

Over two days, one recycling and one landfill bag were collected from each of13 pre-determined sample sites in the Park and analyzed as follows:

- Full bags are weighed.
- All non-organic material is removed and categorized (e.g., plastic utensils, straws, beverage bottles, etc.).
- Each item's resin identification code (RIC) is noted, and total category weights are taken.
- Contaminants from each bag are noted (i.e., recyclables are contaminants in landfill bags and non-recyclables are contaminants in recycling bags.) as well as any unique plastic alternatives or common brands.
- Liquid is collected in a bucket to be weighed and recorded at the completion of each bag.

Composting Methods

- Horticultural waste is collected by staff during daily maintenance of the Park's landscape, primarily carbon-rich material.
- Food scraps are brought by community members to the 10 drop-off locations throughout the Park, primarily nitrogen-rich material.
- All organic waste is transported to the Park's Compost Center on 33rd street where it is weighed and processed in the Park's EcoRich Rapido 2000 industrial composter.
- Volunteer groups support maintenance in the Compost Center.
- Compost is ready in approximately one to two months and returned to plant beds in the Park.

Fig. 3 | Plastics are sorted by resin identification code (RIC) during Waste Audit.

Fig. 4 | Horticultural waste is mixed with community pumpkin donations during the annual Pumpkin Smash.

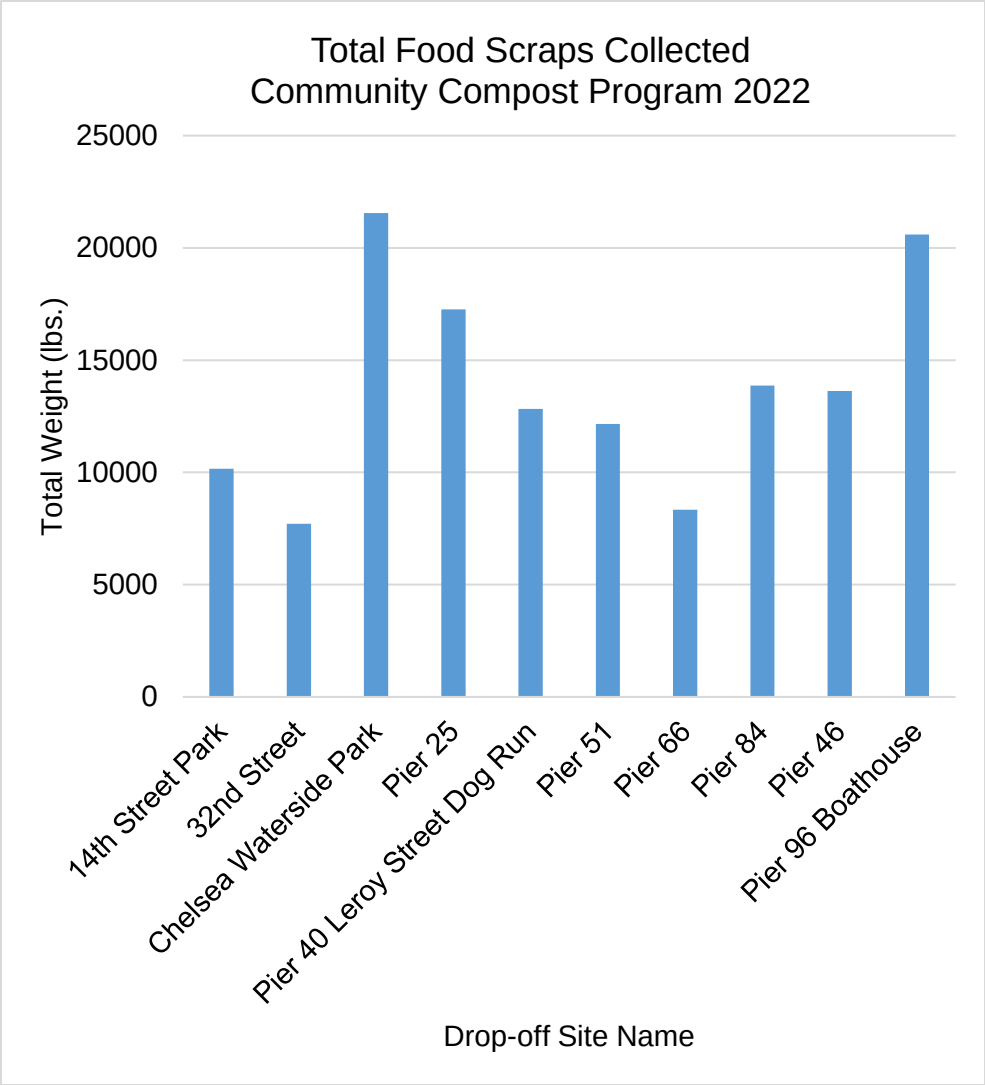

Fig. 5 | Total weight in lbs. of food scraps collected across 10 drop-off sites in Hudson River Park.

Fig. 6 | Map of Community Compost Program drop-off sites in Hudson River Park.

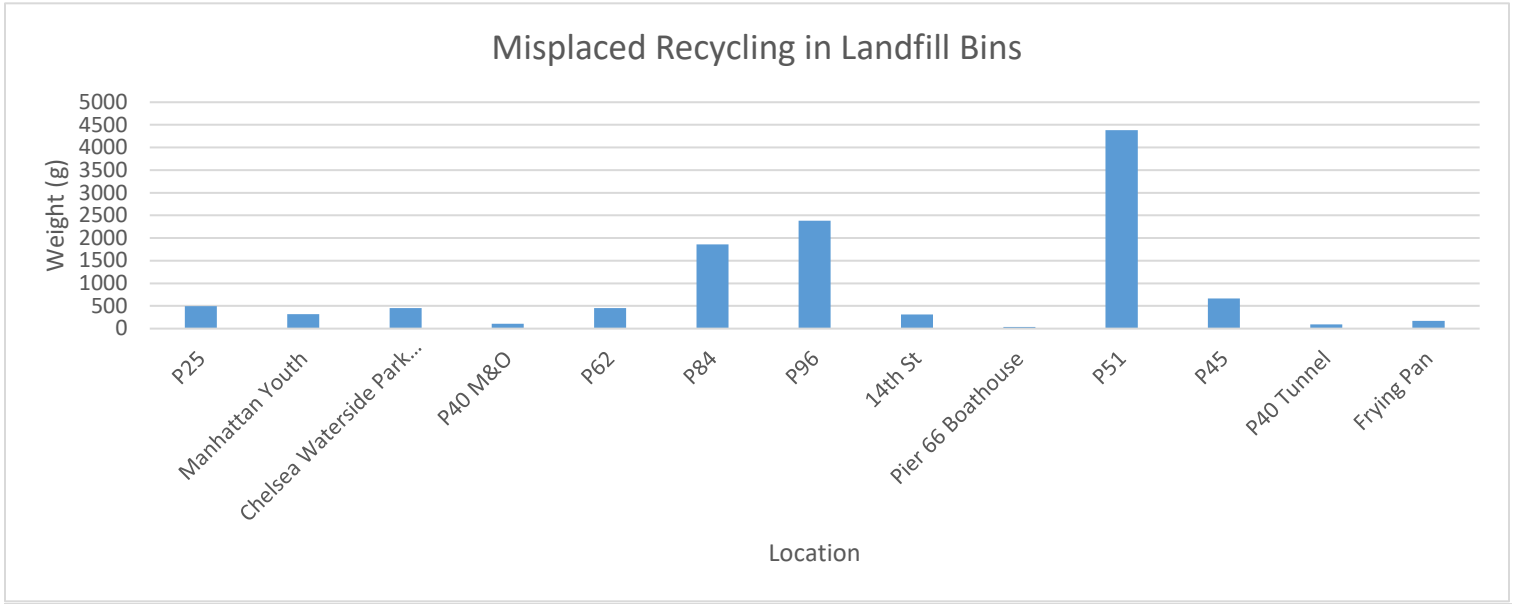

Fig. 7 | Total weight of recyclable material contamination present in landfill bins.

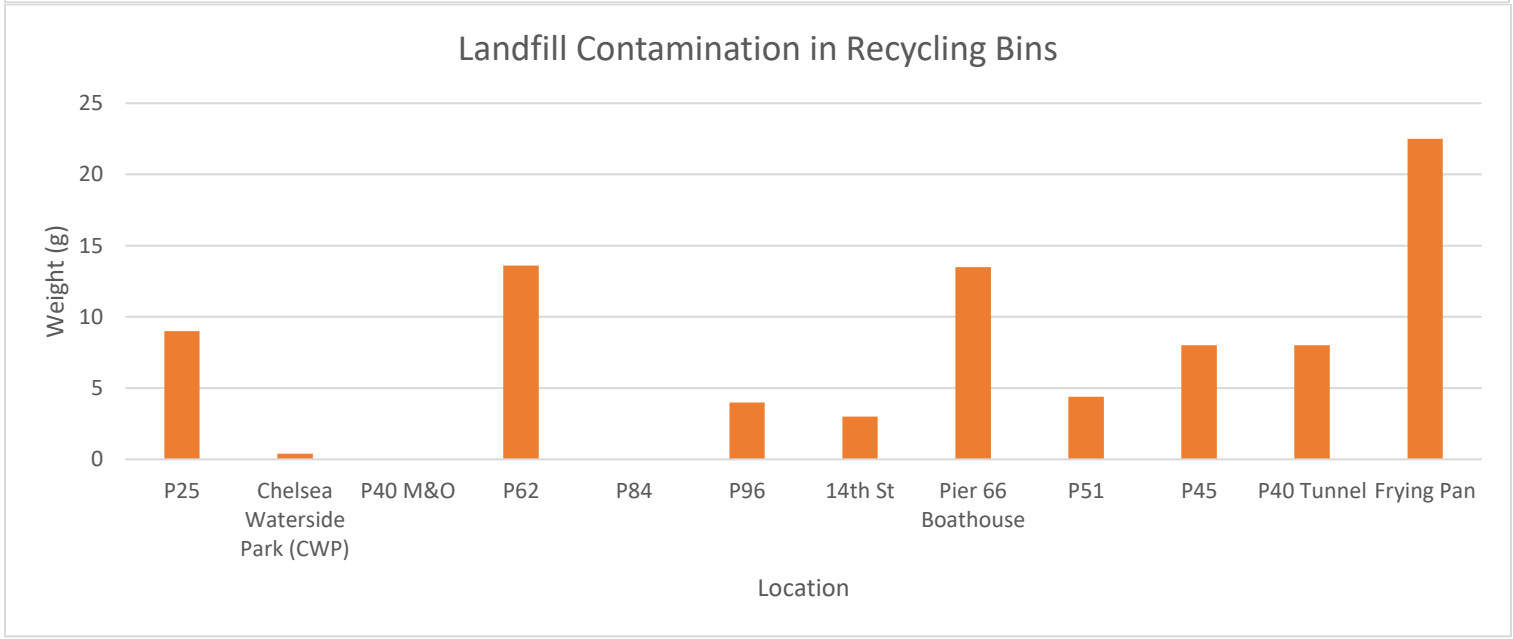

Fig. 8 | Total weight of landfill material contamination present in recycling bins.

Major Findings

The Manhattan Youth Landfill bin had the highest rate of contamination, with 78% of its weight being made up of recyclable materials. This site only had one bin that was audited this year which may account for this high number. Pier 51 had the second highest, at 48%. Pier 66 Boathouse Recycling bin had the highest contamination, with 2% of its weight being made up of non-recyclable materials.

Overall a 98% decrease of contamination was observed in recycling bins from 2021 to 2022. A 56% increase was observed in landfill bins from 2021 to 2022.

As of November 17, 2022, the Park has composted 138,100 lbs. of food scraps. This is a combination of collections from all 10 public drop-off locations, Pier 40 offices, boathouses, and Pumpkin Smash. Combined with approximately 350,000 lbs. of horticulture waste, the Park diverted a total of 488,100 lbs. of organic waste from landfills and processed it into nutrient-rich compost for Park grounds. Of the 10 drop-off sites, the Chelsea Waterside Park, Pier 25, and Pier 96 were the top three contributors, with a combined total of 106,605 lbs. of food scraps. Chelsea Waterside Park continues to be the top contributor with increased public use of bins at Pier 25 and Pier 96. Also, Pumpkin Smash was a greater contributor for organic waste than in past years with the 2022 event having its highest amount of recorded waste of over 2,500 lbs.

Takeaways

The results of the waste audit suggest that Park users' recycling habits are generally improving. Less non-recyclable plastic is ending up in recycling bins. One theory for this change is that people are more likely to make a choice to recycle with the increase of paired trash and recycling bins throughout the Park. Manhattan Youth was an outlier in this trend, likely because there was only one bin accessible to the public to dispose of all waste.

Compost totals continue to rise over the years, demonstrating that locals are increasingly utilizing the Park's drop-off bins to dispose of food scraps. For 2022, it is noted that from January through June, compost rates reached an all-time high before tapering off as the year progressed into the fall. The annual Pumpkin Smash showed that community members are increasingly interested in supporting and participating in Park composting events with 753 attendees at this year's Pier 84 event, more than double the number of attendees from last year.

Fig. 9 | Families contribute to the Community Compost Program by donating old Jack-o-Lanterns at Pumpkin Smash 2022.

Future Directions

The evolution of Park Over Plastic and the Community Compost Program has shown tremendous progress towards the goal of a low-waste Park. The waste audits and ongoing tracking show that recycling and composting in the Park have become more effective in 2022 than ever before. These results provide a positive outlook for the further evolution of both programs. Future improvements in waste education and management could take place in the form of more signage in the Park, community education events centered on waste and waste reduction, incorporating food scraps in future waste audits, continuing to pair landfill bins with recycling bins throughout the Park and, in the long term, considering a switch to smart waste bins such as Bin-E. These actions, though only a starting point, can and will continue to promote the mission of waste sustainability in Hudson River Park.

Fig. 11 | Tomatoes grow in the Community Compost Center garden, where soil is enriched through Hudson River Park compost.

Fig. 10 | Community members tour the Community Compost Center at West 34th St in Hudson River Park.

Fig. 12 | Park staff conduct Waste Audit.