Town of Brookline

SCHOOL COMPOST GUIDE

2022

Department of
Public Works
Brookline, MA

DPW

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Department of Public Works

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INTRODUCTION 1

In the state of Massachusetts, more than 25% of the solid waste stream is made up of food waste, meaning that over *1 million tons* of organic material are sent to landfill or burned at the incinerator each year. Due to the escalating shortage of landfill space, all trash in Brookline is sent to a waste-to-energy incinerator where greenhouse gases are released that contribute to climate change. Composting, a process of controlled decomposition, not only removes organic material from the waste stream, but also creates nutrient-dense soil that can be used to fertilize plants and grow food! Imagine that- a circular waste system that can be achieved simply by diverting organic waste right here in your cafeteria.

Over the past several years, the Town has identified several critical climate goals that will require comprehensive effort, collaboration and Town-wide education to achieve: zero emissions by 2040, as well as a 70% waste diversion rate by 2030. To meet these milestones, it is essential that sustainable actions are integrated into all facets of the Town, including the public school system. This School Compost Guide is intended to serve as a detailed implementation plan to support Brookline Public Schools in launching and/or expanding composting programs in partnership with the Department of Public Works (DPW).

Goals of this Guide

- ✓ Provide a detailed framework to support Brookline's schools in initiating and implementing a self-sustaining composting program, from pre-composting considerations through year 1 implementation.
- ✓ Provide resources for educators to teach students about the environmental importance of composting and contribute to a broader understanding of sustainable systems.
- ✓ Standardize a process for launching composting in both the cafeteria and back-of-house (kitchen), tracking progress and measuring success.
- ✓ Empower the school community to take ownership of their continued growth towards integrating sustainable practices into daily operations and community culture.
- ✓ Support and contribute to the Town's progress towards its zero waste and climate goals.

While this guide is geared primarily towards administrators and interested teachers and students, Chapter 6: Resources contains materials for a wider audience, including kitchen staff, custodial staff, parents/guardians, and community volunteers.

Given the differing dynamics of both the K-8 and 9-12 school communities, elementary school and high school-specific considerations are noted throughout this guide to ensure that the unique needs of each school environment are accounted for. This individualized approach can be seen in Chapter 3: Program Development, where considerations are made to accommodate the unique infrastructure and functionality of each space. Chapter 6: "Resources" also highlights resources geared toward students at various learning levels.

BENEFITS OF COMPOSTING

When we incinerate waste, greenhouse gases (such as carbon dioxide) are released into the atmosphere which trap the sun's heat and warm the planet. Rising global temperatures affect many things like extreme weather, human health, ecosystems and food supply. As we look to combat climate change, we must reduce greenhouse gas emissions and remove and store carbon from the atmosphere. Composting is a great way to do just that.

Enriches Soil and Stores Carbon

- Compost helps soil retain moisture and suppresses plant diseases and pests
- Healthy soils act as a carbon sink and pull carbon out of the atmosphere

Reduces Greenhouse Gas Emissions

- Composting diverts organic material away from the waste stream, which would have otherwise been incinerated

Teaches Students About Sustainable Systems

- Supports knowledge building around environmental issues and solutions
- Builds important sustainable habits that students can share with their families and communities

School Compost Guide Advisory Group

To produce the most comprehensive guide possible, the DPW assembled a group of advisors comprised of representatives from various stakeholder groups across the school community: food services staff, custodial staff, teachers, students, administration, parents, local advocacy groups, and the Solid Waste Advisory Committee. These advisors provided valuable feedback and unique insight on how best to implement composting in Brookline's eight K-8 schools, as well as Brookline High School. The following group of advisors were instrumental in the formation of this guide and their support will help ensure successful school compost programs:

Ed Clancy, *Supervisor of Custodians*
Deane Coady, *Brookline Mothers Out Front & Solid Waste Advisory Committee Member*
Eric Colburn, *BHS Teacher*
John Dempsey, *Solid Waste Advisory Committee Chair*
Amy Gasparetto, *Parent of Driscoll School Student*
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Public Schools Composting Status

Currently, the Town's organics are collected by Black Earth Compost - a local industrial-scale composting company. Black Earth Compost has three facilities in Massachusetts - Groton (their premier facility which receives most of Brookline's compost), Framingham and Manchester-by-the-Sea. These facilities accept all food waste, including meat, bones, dairy, and other compostable materials such as napkins and certified compostable serviceware.

During the 2021-22 school year, both Brookline High School and Lincoln School successfully composted in their cafeterias. Below is a chart detailing the composting status of all schools as of Fall 2022, as well as the status of their transition towards reusable serviceware.

Brookline Public Schools	Compost Education Program	Preliminary Composting Pilot	Implemented Full-Scale Composting	Integrated Reusable Serviceware
Baker				
Driscoll				
Heath				
Lawrence				
Lincoln				
Pierce				
Ridley				
Runkle				
Brookline High *(Main Building)*				
Brookline High *(22 Tappan Street)*				

Pre-Composting Checklist

Before launching a composting program at your school, we encourage you to work your way through the below checklist and meet with the DPW Zero Waste Program to discuss next steps. Chapters 2 and 3 outline in detail all the various elements of this checklist. The quick reference column indicates where in the guide you can find more information about each task.

Phase 1: Getting Organized & Gathering Support

✓	TASK	Responsible Party	Quick Reference
☐	STEP 1: Start assembling a Compost Steering Committee.	School Compost Initiator(s)	Chp. 2, page 7
☐	STEP 2: Contact the DPW Zero Waste Program at zerowaste@brooklinema.gov to notify staff of your interest in launching a compost program.	Compost Steering Committee	Chp. 2, page 7
☐	STEP 3: Organize a meeting with school administration and DPW staff to discuss your vision for a school compost program and the feasibility of implementing this program. Share a letter of support with administration and request their signatures.	Compost Steering Committee	Chp. 2, page 7
☐	STEP 4: Administration representatives of the Compost Steering Committee to consult with the senior custodian and kitchen manager regarding operations and logistics. Ask for suggestions about what would work best for their team.	Compost Steering Committee	Chp. 2, page 8
☐	STEP 5: Identify and execute best strategies to build teacher and paraprofessional support for composting.	Compost Steering Committee	Chp. 2, page 12
☐	STEP 6: Teacher and student representatives of the Compost Steering Committee to identify other interested peers and form a Core Composting Team.	Compost Steering Committee	Chp. 2, page 9
☐	STEP 7: Make a student body engagement & education plan.	Core Composting Team	Chp. 2, page 11

Phase 2: Operations Planning & Preparation

✓	TASK	Responsible Party	Quick Reference
☐	STEP 1: Acquire baseline data (ie. conduct waste audit, share survey, etc.).	Core Composting Team	Chp. 3, page 13
☐	STEP 2: Check in with the DPW Zero Waste Program to discuss progress. Ask DPW staff to begin Steps 3, 4 and 5 below.	Compost Steering Committee (Chair)	
☐	STEP 3: Work with the kitchen manager and senior custodian to determine the following: ☐ Waste station(s) location(s) ☐ Suitable back-of-house location for compost toter collection ☐ Schedule and conduct trainings with kitchen and custodial staff, as necessary	Department of Public Works Staff	Chp. 3, page 15
☐	STEP 4: Arrange compost collection with Black Earth Compost.	Department of Public Works Staff	
☐	STEP 5 (Optional): Contact Brookline Food Pantry and determine a food rescue pick-up schedule.	Compost Steering Committee	Chp. 3, page 15

Phase 3: Infrastructure Set-Up & Community Outreach

✓	TASK	Responsible Party	Quick Reference
☐	STEP 1: Continue school community education & engagement.	Core Composting Team	Chp. 2, page 11
☐	STEP 2: Prepare and send outreach materials to parents/families.	Core Composting Team	Chp. 2, page 12
☐	STEP 3: Assemble team of community volunteers to monitor waste stations and support students and staff at onset of program.	Department of Public Works Staff	Chp. 3, page 18
☐	STEP 4: Establish waste station monitoring system.	Compost Steering Committee	Chp. 3, page 17
☐	STEP 5: Conduct training for community volunteers and others, as necessary.	Department of Public Works Staff	
☐	STEP 6: Organize a school-wide assembly to discuss the importance of composting and demonstrate how to sort waste in cafeteria. Invite community volunteers to be present.	Core Composting Team	Chp. 2, page 11
☐	STEP 7: Set up the waste station(s) and back-of-house composting infrastructure. Post DPW standardized signage in cafeteria and back-of-house (may post additional signage if desired).	Department of Public Works Staff, Kitchen Manager, Core Composting Team	Chp. 3, page 15

Getting Organized and Gathering Support

To successfully launch composting at your school, you'll need to have the support of others within your school community. We recommend first sharing your ideas and seeking out others who are supportive of the idea. Reach out to environmental school clubs, teachers, staff, and parents, and assemble a core group of enthusiastic composters! Once you have several folks on board, contact the DPW Zero Waste Program at zerowaste@brooklinema.gov so that DPW staff can offer support and assist your team as you seek buy-in from other important stakeholders in the school community.

Forming a Compost Steering Committee

Ensuring stakeholders from across your school's community are supportive and involved from the beginning is critical to the success of a school's composting program. Each school should have its own Compost Steering Committee – a committee made up of representatives from different sectors of your school's community (administration, students, custodial staff, kitchen staff, teachers, and parents/PTO). A 7-10 person Steering Committee will provide vital insight into the various factors that impact the implementation of school lunchroom and back-of-house (kitchen) composting. If you can't get representatives from all groups on your Committee, you can call on additional people for their suggestions and feedback as necessary.

Responsibilities of the Compost Steering Committee include:

- Ensure all stakeholders are informed and involved during program development and implementation
- Troubleshoot issues as they arise
- Provide insight & feedback on program operations
- Meet approximately 3 times per year

The Steering Committee is not only integral to planning and developing a successful compost program, but is also an essential resource during implementation and beyond. We recommend your school's Steering Committee meet, at minimum, 3 times a year (at the beginning, middle, and end of school year). You will likely require more frequent meetings before and during implementation. Each school is bound to face unique challenges and obstacles while composting – the Steering Committee is intended to serve as a resource to provide insight and feedback as obstacles arise and help brainstorm solutions. The Steering Committee, with DPW support, may also provide an annual update to the School Committee or School Department to share progress. We recommend electing a chairperson of your Committee to serve as the main point of contact with the DPW's Zero Waste Program and to be accountable for organizing Steering Committee meetings. Steering Committees should notify the DPW Zero Waste Program of any upcoming meetings so that DPW staff can attend (when feasible) and stay informed of progress.

Administration Involvement

A school administrator will not only have valuable insight into the school's operations, but can also be a strong, influential advocate for composting. School administration can introduce staff to the program in September, announce reminders to the student body throughout the year, and encourage teachers to integrate composting activities and resources into the classroom. Early in the process, the Compost Steering Committee should set up a meeting with DPW staff and school administration to discuss the importance of composting, their vision for the school, and share a pathway forward, informed by this

guide. Before moving forward with school composting, it is critical that you have the support of your school's administration. We recommend drafting a letter of support (see DPW's "Template Letter to Administration" in Chapter 6: Resources) and requesting that an administrator sign-on as a means of demonstrating their support for a school compost program. The DPW does not recommend moving forward with a composting program without administrative support.

Kitchen Staff & Custodial Staff Involvement

Consulting Kitchen and Custodial Staff

As you look to start composting at your school, you will need to consult custodial and kitchen staff. You will want to discuss operations and logistics for composting in the cafeteria, as well as in the back-of-house (kitchen) where the food is prepared.

Respect the time and ability of kitchen and custodial staff. Ensure you check in with the kitchen manager and senior custodian (if they are not already part of your Steering Committee), and ask them for suggestions about what would work best for their team.

Larry Cronk, Senior Custodian at Brookline High School's Freshmen Campus, has been a strong supporter of composting and has set up effective waste stations throughout the cafeteria.

A note - The Covid-19 pandemic has made sourcing materials incredibly difficult and many of our schools are incredibly short-staffed at present. In order to successfully launch a composting program, **kitchen and custodial teams need to be in a position where they can support this work.** *Before you start composting, check in with your kitchen manager and senior custodian about their staffing levels and what their current capacity is. Supply chain issues may also arise as you look to move towards reusables and/or compostable serviceware* - **please be patient and respectful of the staff that are trying to source these materials.**

Trainings and Resources for Kitchen and Custodial Staff

In order to support the successful integration of composting into kitchen and custodial operations, DPW staff is prepared to host trainings for kitchen and custodial staff at the beginning of the school year (and/or whenever necessary). These trainings will aim to identify best composting practices, as well as discuss how to handle various situations or challenges staff may experience (i.e. the procedure if the dishwasher breaks, what to do if teams are short-staffed, etc.).

The DPW has also created several resources to support these staff throughout the school year as they work to integrate composting into their routines. For instance, clear, multilingual signage posted in the back-of-house can help distinguish what is and is not compostable (see Chapter 6: Resources for template signage).

Engaging the Student Body

Students will be the group producing the most compost at your school and sorting their waste daily, so it is critical that they are involved from the beginning for a compost program to be successful. Studies have shown that establishing routines at the beginning of the school year results in greater, more successful student engagement and incorporation of new habits and procedures[1]. If possible, we suggest working through the pre-composting checklist over the spring semester in preparation to launch a compost program at the beginning of the following school year.

Assembling a Core Composting Team

People are influenced by the behaviors they observe, meaning that students are more likely to compost if they see others doing so, particularly peers[2]. Perhaps your school already has an environmental club or a group of students who are interested in composting - these students should be the first people you contact as you look to assemble a Core Composting Team. The team should be made up of approximately 8 or more students, and monitored by (an) interested teacher(s) or paraprofessional(s). If your school doesn't have an environmental club, you may want to ask teachers to share information about the Core Composting Team during their classes.

Responsibilities of the Core Composting Team include:

- Peer education/Compost advocacy
- Data-measuring (waste audits, surveys, etc.)
- Problem-solving
- 1-2 representative(s) from this group shall serve on the larger Steering Committee.

Core Composting Team	Compost Steering Committee
Who: Group of students interested in composting, led by faculty. **Purpose:** To educate & engage the school community around composting. **Responsibilities:** • Peer education/compost advocacy • Data-measuring • Problem-solving	**Who:** Representatives from different sectors of your school's community: administrators, students, custodial staff, kitchen staff, teachers, PTO. **Purpose:** To ensure all stakeholders are informed & involved during program development and implementation. **Responsibilities:** • Provide insight/feedback on program operations • Troubleshoot any issues

1 Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The First Days of School in the Classrooms of Two More Effective and Four Less Effective Primary-Grades Teachers. The Elementary School Journal, 104(4), 269-287. http://www.jstor.org/stable/3202942

2 Sussman, R., & Gifford, R. (2013). Be the change you want to see: Modeling food composting in public places. Environment and Behavior, 45(3), 323-343.

While the purpose of the Compost Steering Committee is to ensure all stakeholders are informed and involved during program development and implementation, the Core Composting Team's primary objective will be to determine how best to educate their community. With the support of DPW staff, the composting team can utilize DPW pre-made educational resources (see Chapter 6: Resources) and develop their own unique materials.

The Core Composting Team will be tasked with not only assisting DPW staff in preparing the cafeteria with all necessary signage and educational materials (ie. bin labels, posters, etc.), but also engaging with and educating their peers both inside and outside the lunchroom (ie. giving presentations to their peers, reporting on progress, etc.). To keep Core Composting Team members motivated, we encourage schools give special recognition to participants – offer certificates for participation, hang posters to show progress, get press coverage, offer prizes, etc.

Top 4 Tips to Change Behavior

Adapted from information provided by Meg Martineau,
New England Behavior Analysts for Sustainability and Newton Public School Teacher

Tip 1: Use Positive Reinforcement. Add a stimulus after a behavior occurs, such as a reward or social praise.

- ✓ *School Composting Example: Students who properly sort their waste are offered a lottery ticket. At the end of the day, lottery winners receive a prize.*

Tip 2: Lower Response Effort. Make the desired behavior easy.

- ✓ *School Composting Example: Use clear and accurate signage and place compost bins adjacent to the trash.*

Tip 3: Take a Baseline. You can't measure progress until you have a reference point.

- ✓ *School Composting Example: Waste audits can help identify how much waste is being generated and the components of that waste. This data can be used to inform changes and to track progress.*

Tip 4: Social Diffusion. We are influenced by the behaviors of others and imitate what we observe.

- ✓ *School Composting Example: If students observe their peers composting, they are more likely to start composting themselves.*

Student Body Education & Engagement Strategies

Promoting composting can go a long way to raise awareness and interest in your new program! We encourage the Core Composting Team develop a student body engagement and education plan. This plan should list various educational and engagement tactics to increase participation in composting and recycling, as well as inform the school community about related topics, including sustainable food systems and "Meatless Mondays". Your plan should outline a proposed timeline to execute each identified strategy.

ENGAGEMENT TIP

Ask businesses to donate items or coupons. Use these prizes to incentivize student behaviors or involement. Items should be things that students would enjoy, such as movie theater tickets, ice cream store gift cards, sport merchandise, etc.

The Core Composting Team's engagement and education plan should include an introductory compost assembly. Work with your school's administration and DPW staff to organize an assembly on the importance of composting and proper waste sorting practices before the launch of your compost program. Make it fun and interactive - bring a waste station on-stage and call on volunteers from the audience to demonstrate how to sort their waste. Alternatively, work with DPW staff and administration to organize brief lunchroom assemblies on proper waste sorting practices. At the start of each lunch wave on a chosen day, take 5-10 minutes to demonstrate how to use your school's new waste station(s) and discuss the importance of composting and recycling. Whatever format you choose, we recommend that community volunteers are present so that they may introduce themselves to the school community!

We have listed several education and engagement strategies below for the Core Composting Team to consider. See Chapter 4: Program Implementation for additional suggestions!

- ✓ Prepare compost presentations for different age groups and work with your school's administration to schedule presentations to peers during advisory or morning meeting.
- ✓ Make flyers or posters about composting to post around school. This could be a project undertaken by the Core Composting Team alone, or could be part of an art class. You could even work with administration to organize a school-wide Compost Poster Contest and offer prizes for posters that teach about composting or motivate students to sort their waste correctly.
- ✓ Develop a video to discuss the "why" and "how" of composting. See if you can get this video shared with all students over the class television and/or during assemblies or student orientations. Check out the video in Chapter 6: Resources prepared by BHS students and community volunteer Jon Stahl for an example.
- ✓ Launch a social media campaign. Develop tik-toks, instagram posts, etc. all about composting! Make them funny and engaging!

Case Studies

Heath School: *At Heath School, the Student Council created powerpoint presentations on composting for their 6th, 7th and 8th grade peers.*

Natick High School: *A video production student worked with the school's Compost Team on a promotion shown to all students the day the program launched. This was supplemented with flyers, daily announcements, raffles and treats to encourage and remind students to participate in the program.*

Family/P.T.O. Engagement

The Core Composting Team should also consider how to engage the families of students and notify them of the upcoming program. This could be as simple as putting together a newsletter article and including it in the P.T.O. newsletter or other resources, such as school or club e-news sources. Alternatively, it could involve developing and asking students to bring home a notice that 'Compost is Coming!' and asking parents/guardians to sign a "Waste-Reduction Pledge" (see Chapter 6: Resources). A Waste-Reduction Pledge is an agreement that families can sign stating that they are willing to reduce their waste at home by finding reusable alternatives to single-use plastics, composting their organic waste, opting for reusable bags when grocery shopping, repurposing materials, and much more!

Building Teacher & Paraprofessional Support

Encouraging teachers and paraprofessionals to support your compost program through classroom compost activities and lessons will ensure that all students learn about, and participate in, composting through a multidisciplinary lens. The Compost Steering Committee should collaborate with administration to identify best strategies to educate and engage teachers around composting. Supplementing students' waste-sorting experiences in the lunchroom with daily learning about composting in the classroom will be the most effective means of solidifying this new knowledge.

Consider the following strategies to build teacher and paraprofessional support around composting and ensure success:

- ✓ Share a PowerPoint presentation on composting at the Opening Day Meeting to introduce teachers and paraprofessionals to the compost program.
- ✓ Provide a video or PowerPoint presentation on composting that teachers can share with their students (see Chapter 6: Resources).
- ✓ Disseminate pre-made lists of books, videos and songs about composting (see Chapter 6: Resources). Consider displaying these materials in the teachers' lounge or library.
- ✓ Work with school administrators and DPW staff to organize and host trainings for teachers and paraprofessionals.

The DPW, in collaboration with the School Department, has assembled lists of books, videos and songs about compost, climate action, and sustainable food systems for each age group. Teachers can integrate these educational resources into their advisory or morning meetings through interactive read alouds, or play songs during lunches and/or snack time for younger grades. These materials can be found in Chapter 6: Resources. Compost is a highly interdisciplinary topic and is applicable to numerous school subjects, including science, math, art, and English. The level of compost education in the classroom is dependent upon each teacher's capacity. The School Department is currently exploring the development of composting curricula for several grades.

PROGRAM DEVELOPMENT 3

After building support within your school for composting and forming both a Compost Steering Committee and Core Composting Team, you can move forward with the logistical pre-composting considerations essential for a successful composting program. These include not only the operational and infrastructural factors that must be considered, but also a system with which to measure and track progress.

Collecting Data and Measuring Progress

Acquire Baseline Data

Gathering baseline information before implementing a compost program is absolutely critical as it will enable your school to track and measure its progress, as well as inform future composting efforts. However your Core Composting Team chooses to gather data (either via a waste audit and/or a survey), we strongly recommend repeating the same process annually. This will ensure that you have consistent, comparable data that you can then use to illustrate growth and progress. If you require assistance or support acquiring baseline data, please contact DPW staff.

Waste Audit

A waste audit is a fun, hands-on activity that involves weighing trash generated during lunch, and documenting which commonly observed materials could be diverted away from incineration. Once your school has this data, you can effectively track progress and measure any changes in the waste stream resulting from composting. Below are two types of waste audits that can be performed. Schools can decide which audit would work best for them. It is recommended that you document your process so that it can be easily replicated in the future. Additional waste audit resources can be found in Chapter 6: Resources.

Basic Waste Audit

Over a one-week period, weigh out how much waste is generated daily in the lunchroom. Unlike the detailed waste audit, there is no requirement to sort and document the contents of the waste.

Detailed Waste Audit

Over a one-week period, weigh out how much waste is generated daily in the lunchroom and determine how much of the waste stream is comprised of compostable or recyclable materials. The team conducting the waste audit can assign specific roles to each person. You will need a recorder, weigh-ers, sorters and counters. Identify and document materials that are frequently observed. Which types of foods are being wasted most? Are there specific serviceware items that could be replaced with a compostable/reusable alternative?

Survey

Baseline data could also involve developing and conducting a survey to measure the experience, knowledge and attitudes of students (and other members of the school community) around composting. Through this process, the Core Composting Team can work to understand where there might be knowledge gaps and then use that data to inform education and outreach strategies. A survey template is included in Chapter 6: Resources and could be distributed by teachers during advisory/morning meetings. A survey will be suitable for students grades 5 and above. If you are interested in assessing the knowledge of younger students, we encourage working directly with their teachers.

Infrastructure and Equipment

Department of Public Works Involvement & Support

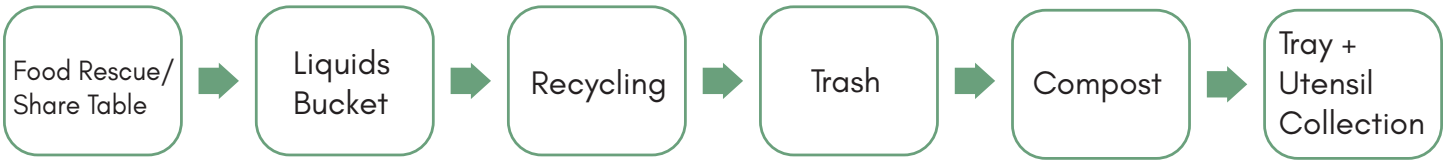
To support the success of school composting programs, the DPW has committed to funding and managing various operational components throughout the school year. In addition to funding the basic equipment necessary to compost, the DPW will serve as the primary point of contact with Black Earth Compost for any logistical/operational questions or feedback. The DPW will work to foster inter-school communications so that students, teachers, and others can connect to share ideas and best practices. Outlined below is a list of resources the DPW can provide to all schools that launch a composting program. Funding for additional resources (such as Compost Awareness Week incentives [page 22], field trips to the Black Earth Compost facility [page 22], etc.) may be available upon request. Please contact the DPW's Zero Waste Program to inquire. The DPW can also collaborate with schools on grants and other additional funding opportunities (as staff workloads allow) to support composting and other waste reduction efforts.

Resources Provided by DPW
Infrastructure
Cost of Black Earth Compost Collection
Compost Receptacles • Cafeteria Waste Station Bins & Assorted Tools • 64 Gallon Carts for Back of House Collection • BHS Specific: Student Café and Culinary School Receptacles
Compostable Liners for Receptacles
Volunteer & Student Compost Monitor Equipment • Food-Grade, Latex-Free Gloves • Aprons
Educational "Starter Kit" (Upon Request)
Printed Materials • Back-Of-House Multilingual Signage • Standardized Waste Station Signage • Take-Home Waste Reduction Pledge
Waste Audit Resources
All (Scales, Tubs, Tarps, Etc.)

Creating a Successful Waste Station

A successful waste station allows students to easily sort their waste while ensuring easy management and cleanup for custodians. We recommend observing several days of lunch to note the flow of traffic and custodial/kitchen operations. Here are a few key considerations to keep in mind when planning your waste station:

- ✓ **Waste Station Location**: Locate your waste station in an accessible location (ideally next to a kitchen window for ease of tray collection). Keeping your waste station in a consistent location is important to minimize confusion and build habits!
- ✓ **Bin Sequence**: Laying out waste receptacles in a logical order can make sorting easier and reduce contamination. We recommend the following sequence (from left to right):

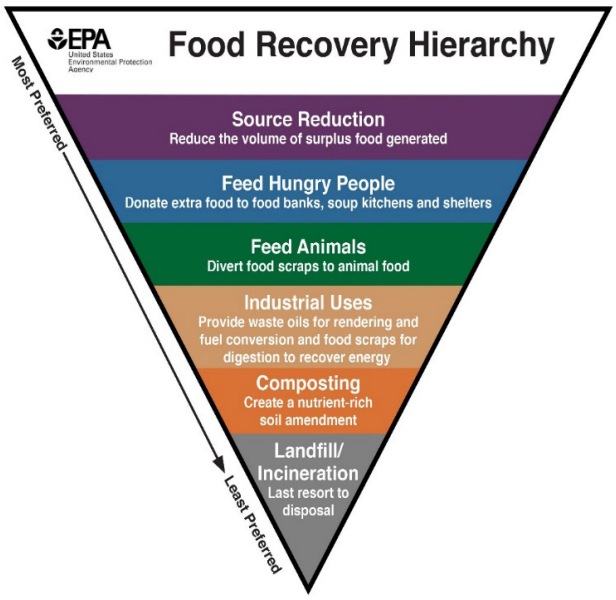


- ✓ **Consult with Custodial Staff:** The Compost Steering Committee should consult with the school's senior custodian to determine how to integrate composting into existing routines with minimal disruption to regular operations.
- ✓ **Develop Signage:** Signage should be at eye level and include large, clear fonts and eye-catching colors/graphics. Waste station signage can be found in Chapter 6: Resources. To supplement this pre-prepared standardized signage, students can develop their own unique signage, if interested. However, please note that DPW standardized signage *must* be posted to ensure consistency across schools.
- ✓ **Useful Tools:** Attaching a spatula to the compost bin can be useful for students scraping their trays (and can limit the amount of mess and spillage). Long-handled tongs are also a useful tool for picking out non-compostable contamination.

Food Rescue

The EPA's Food Recovery Hierarchy prioritizes donating and redistributing food above composting, and a Food Rescue/Share Table is a great way to support the Brookline community. Items placed on this table can either be collected for other students to consume during or after the meal service, or could be collected once a week by volunteers and shared with the Brookline Food Pantry. The Brookline Food Pantry will only accept *shelf-stable*, *unopened* and *viable* (*non-expired*) items during these regular weekly donations (such as fruit cups, cartons of raisins, etc.).

If you are interested in learning more about donating food items to the Food Pantry, please contact the Brookline Food Pantry directly at 617-800-5339 or brooklinefoodpantry@gmail.com.



Waste Station Components

1. Food Rescue/Share Table Station: Here is where students can drop off whole and/or unopened food or beverage items from school meals that they did not eat. This station, while recommended by the DPW, is optional. Please ensure your school's administration approves of a Food Rescue/Share Table before including one in your waste station. Your school can choose whether you would like this station to be solely for donations to the Food Pantry, or if you would like to gather unopened food items for other students to consume during or after the meal service. Please note that the Brookline Food Pantry only accepts *shelf-stable, unopened* and *viable* (*non-expired*) items at this time (such as fruit cups, cartons of raisins, etc.).

2. Liquids Bucket: Students can dump any unfinished, open drinks in this bucket. This keeps liquids out of the compost and trash, minimizing mess! Liquids can be dumped by custodians into the nearest flushable drain once the bucket is full.

3. Recycling Receptacle: This receptacle is for clean plastics, paper, cardboard, aluminum, and glass. While most serviceware products offered by the cafeteria will be compostable or reusable, there are several frequently offered products (e.g., sandwich clamshell containers) that are clean enough to be recycled. In addition to posting the DPW's standardized signage indicating what can/cannot be recycled, the Core Composting Team should consider how to educate their peers about recycling, in addition to composting, as we often see a great deal of contaminated recycling in schools.

4. Trash Receptacle: This receptacle is for items that cannot be composted (or recycled if your school's cafeteria has a recycling bin), such as plastic (non-compostable) utensils and straws, plastic bags, chip bags, plastic-lined cardboard/paper, or any recyclables covered in food.

5. Compost Receptacle: All food scraps and food-soiled paper goes here! You can compost napkins, certified compostable serviceware, as well as all food waste including dairy, meat, and bones. Please note: compostable serviceware products must be BPI, CMA or OK Compost certified. Items that only say "biodegradable", "compostable" or "ASTM-6400 Certified" are *not accepted* by Black Earth Compost. See Chapter 6: Resources for a full list of what materials Black Earth Compost accepts.

6. Tray and Utensil Collection Station: Set up a rack to collect reusable trays or have students neatly stack them. Put 1-2 plastic tubs out with 1-2 inches of warm soapy water and have students place their reusable utensils in them.

COMPOST TIP

If you haven't yet transitioned to reusables or need to first use up remaining compostable serviceware, have students stack their trays at the kitchen window. This will build good waste station habits, meaning transitioning to reusable trays will be easy!

Waste Station Monitors

To sustain a school composting program, waste stations should be monitored to ensure minimal contamination of the compost and recycling receptacles, and to educate students and staff how to correctly sort their waste. During the launch of your school's compost program, community volunteers can serve as a terrific resource and monitor waste stations as you begin to introduce students and staff to new waste sorting practices. To ensure a successful, longterm program, it is the DPW's goal to identify and incentivize opportunities for students and staff to monitor their school's waste stations during lunch.

The basic responsibilities of waste station monitors include:

- ✓ Periodically monitor the waste station and ensure correct waste sorting
- ✓ Answer questions and educate peers
- ✓ Pick contamination out of the compost using gloves and metal tongs

High school waste station monitors are encouraged to take on some additional duties, including:

- ✓ Ensure that trays are stacked neatly
- ✓ Clean up any food/trays left in the outdoor "quad" area near the end of the lunch period
- ✓ Support and assist custodians by removing litter/uneaten food from tables and wiping tables clean, as necessary

Teacher/Paraprofessional Waste Station Monitors

The DPW encourages teachers and paraprofessionals who are on lunch duty to help monitor waste stations when possible and support students as they sort their waste. However, we recognize that each school is different and the capacity of teachers/paraprofessionals to perform this work may vary from school to school. The DPW recommends discussing what might be possible for your school during the introductory compost program meeting with administration and the DPW (described on page 7).

Student Waste Station Monitors

Elementary School Student Monitors

In regards to developing a waste station monitoring system for your elementary school, we recommend establishing a rotational system in which all students are, at some point, required to serve as a monitor. This approach has been documented as successful at both Heath and Lincoln Schools. A mandatory system indicates that school composting is something that *everyone* is a part of and that *all students* have a communal responsibility to support and uphold the program. At the end of the year, there should be a party or means of celebrating and recognizing the work of the school community.

Case Studies

Lincoln School: *As a result of the support and leadership of middle school science teachers Alejandra Traub and Sue Zobel, Lincoln began composting in 2018. Their monitoring system requires that middle school science students manage the waste station on a rotation during lunch.*

Heath School: *Heath began a composting pilot with their middle school students. All middle school students were required to participate in compost monitoring during lunch. Schedule rotations were posted in the cafeteria weekly.*

Chittenden County, Vermont: *One school requires that one class per month "adopt" the composting bins and set up their own monitor schedule. That classroom teacher will excuse 2 students per day to monitor food bins for an entire lunch period. Since this usually means missing a little class time, students tend to love this idea. At the end of the year, there is a celebration to recognize the school community's efforts*!

High School Student Monitors

Due to the diversified nature of high school student schedules and age of the students, the DPW recommends that Brookline High School incentivize students to volunteer as waste station monitors. A combination of the below incentives could be employed simultaneously depending upon student interest:

- ✓ Offer an incentivized competition (similar to the "Slash the Trash Competition" at Hingham High School, as described in the case study below) that athletic teams and other school clubs could choose to take part in.
- ✓ Students who volunteer as monitors are entered into a weekly raffle (similar to the system in place at Arlington High School, as described in the case study below).
- ✓ Offer community service hours to students that sign up to volunteer as waste station monitors during lunch.
- ✓ Students who volunteer as monitors a certain number of times receive a title of "Environmental Student Leader" which can be used on college applications/resumes.

Case Studies

Hingham High School *(Hingham, MA)*: *Various sports teams and clubs in the school participate in a "Slash the Trash Competition" to see which group can promote the most participation in composting and recycling. Each team is assigned a day to monitor the waste station. Points are deducted for every recyclable or compostable item found in the trash. The group with the least points at the end of the school year wins a catered lunch donated by a local pizzeria. The competition first started during the 2011-2012 school year, and as of 2022, approximately 80% of the student body takes part in the competition*!

Arlington High School *(Arlington, MA)*: *This school launched a composting pilot on Fridays that involved a weekly gift card raffle and community service hours for student participation.*

Role of Community Volunteers

For the past several years, community volunteers have provided critical assistance monitoring school waste stations and educating students, teachers, and staff. To support the development of a long-term, self-sustaining compost program, it is critical that schools transition from community volunteers to student and teacher/paraprofessional leadership. We feel it is vital that the school community feel empowered to take ownership of their compost program and work to educate their peers and staff members. We hope to use community volunteers in schools to facilitate the onset of a composting program and to provide extra support as required. We recommend that community volunteers attend the introductory compost assembly at the onset of the program to introduce themselves to the school community (more information on this assembly on page 11).

John Dempsey and Deane Coady (pictured to the left) are community volunteers that advocated for and supported the launch of composting at Brookline High School.

We envision the following phased approach:

DPW to establish group of community volunteers (interested parents/guardians, supportive community members, etc.) to monitor waste stations, minimize contamination, and prompt students to follow signage.

DPW to train all waste station monitors, including community volunteers, students and teacher/para-professional compost leaders.

Students/teachers/para-professionals to monitor waste stations with daily support from volunteers.

After the first 2-3 weeks, volunteers to come in less frequently (1-2x a week) to support as necessary, until the student/teacher/para-professional monitors are comfortable continuing on their own.

Students/teachers/para-professionals to monitor waste stations independently and educate their peers.

Elementary School Waste Station Considerations

- ✓ Most cafeterias will only require 1 waste station (larger elementary schools, such as Ridley and Pierce, may require 2-3)
- ✓ All schools have a kitchen window in close proximity to the dishwasher - if possible, we suggest positioning the waste station adjacent to this window so that students can place their reusable trays and utensils in the window for kitchen staff convenience.
- ✓ DPW signage must be used for consistency across all schools. To supplement this pre-prepared standardized signage, students can develop their own unique signage, if interested. Signage should be simple, with large colorful pictures and minimal text.
- ✓ During warmer seasons, some schools allow students to eat outdoors. This may present additional challenges in regards to compost collection - schools should work with their Compost Steering Committee and DPW staff to identify solutions.

B.H.S. Waste Station Considerations

- ✓ The High School's population size and open campus system exponentially increases the number of waste stations necessary to effectively and efficiently collect waste and reusable serviceware. It also increases opportunities for contamination, as students often bring in food, along with unfamiliar packaging products, from off-campus which can be challenging for waste station monitors to correctly sort.
- ✓ During certain seasons, students can eat outdoors in the main "quad" area. It is recommended that a waste station is located adjacent to the side doors exiting into the "quad" so it can be easily monitored.
- ✓ Due to the volume of waste stations, reusable trays should be stacked on mobile racks.
- ✓ Consider locating waste stations back-to-back in centralized locations to minimize a bottle-neck phenomenon.
- ✓ A waste station should be located near the Student Café, and a back-of-house composting bin should be available for Student Café employees to use.

Composting Considerations: First 6 Months

During the first 6 months, it is likely your school will run into some obstacles and challenges as you launch your compost program. It is critical that the Compost Steering Committee meet with some regularity to check in and trouble shoot any observed issues. We also recommend that that Core Composting Team meet frequently with the DPW during this time to touch base on progress, challenges, and needs.

Below are some example issues you may observe as well as example solutions:

Problem: When dumping their food waste, students sometimes create a mess on the floor.

Solution: Work with the DPW to widen the food waste barrel openings and make sure spatulas are attached to the food barrels for scraping.

Problem: Black Earth Compost missed a pickup.

Solution: Contact the DPW Zero Waste Program immediately and keep compost indoors until the next opportunity for pickup, if possible.

Problem: The dishwasher breaks/is temporarily not operational.

Solution: Provide compostable trays to students and unpackaged compostable utensils in a utensil holder (organized by utensil type). Place signs in the front-of-house and by waste stations notifying students that trays and utensils should be composted.

Problem: There are supply chain issues and, while your school typically provides students with compostable yogurt containers, you must temporarily use non-compostable plastic containers.

Solution: Place signs in the front-of-house and by waste stations notifying students that yogurt containers should, temporarily, be disposed of in the trash (these cannot be recycled as they are typically too dirty). Include pictures in the signage. Ask administration to make an announcement over the P.A. system notifying students of this change and reminding students to look for the word "compostable" on items to ensure they sort their waste appropriately.

Compost Education and Engagement

The first 6-months of your school's program is a critical time to promote composting and raise interest and awareness throughout the school. Planning any sort of promotional activity will require time. For this reason, it is critical for the long-term success of a compost program to have a Core Composting Team that can commit the time to plan and carry out these activities and events.

Dedicating one week in September or October to serve as a "Compost Awareness Week" is a fantastic opportunity to build momentum and awareness. This could involve offering some incentive or reward to encourage program participation after students have been given some basic instruction and are becoming familiar with the waste-sorting system.

Case Study

Newton Angier Elementary School *(Newton, MA)*: *This school reinforced composting using a raffle system. For one week, students who correctly sorted their waste were given a raffle ticket. At the end of each lunch, 10 winners were selected and could choose a prize: either a recycle notebook, a bracelet or pencil. This engagement tactic is cost effective, time efficient and promoted learning.*

Below are other promotional ideas and opportunities for your school to consider:

- ✓ Set up a composting display in the library – include books that discuss composting (see Chapter 6: Resources). This is a great opportunity to include resources on sustainable food systems and climate justice, as well.
- ✓ Organize a field trip to Black Earth Compost's composting facility or Brookline Food Pantry. Funding for field trips may be available from the DPW, upon request.
- ✓ Offer a compost advertisement contest for students. Video or audio production students could create radio jingles or television commercials advertising compost. A local radio station or local public access station (such as Channel 3: Brookline Interactive Group) could play the winning jingle/advertisement or it could be played on the School's P.A. system.
- ✓ The Core Composting Team could develop a "Tip of the Week" and work with administration to have it read aloud over the P.A. system or scrolled on the class television as part of the school event postings. Example composting and recycling tips include: "You can compost your clean or dirty (food-soiled) napkins"; "Remember that black plastic can't be recycled in Brookline"; "Be sure to check your plastic containers to see if they have the word 'compostable' on them!"

Composting Considerations: 6 Months – 1 Year

As the year progresses, the school should work to integrate composting into other events and holidays:

- o America Recycles Week (the week that includes November 15)
- o Earth Day (April 22)
- o International Compost Awareness Week (celebrated the first week of May)
- o Arbor Day (last Friday in April)
- o Graduation celebrations
- o Freshman/new student orientation

The school should also find opportunities to recognize Core Composting Team participants (ie. offer certificates, prizes, press coverage) and celebrate accomplishments (ie. put up signs and posters to show progress). Recognizing community leaders and celebrating success will be essential for keeping spirits high, encouraging consistent involvement, and ensuring that the momentum behind the program doesn't wane.

Following Year 1 Implementation & Ongoing Considerations

Below are several considerations that should continue to be addressed after the first year of lunchroom composting:

- ✓ Compost Steering Committee should continue to meet to check in and discuss progress, goals, operational issues, etc. While the first year will require more frequent check-ins, subsequent years should only require approximately three check-in meetings a year. Some valuable questions to ask include:
    - What is the general attitude of students and staff about the composting program?
    - Are students successfully sorting their waste? If not, why?
    - What adjustments can be made to make the program more efficient?
    - How can we recognize and celebrate our accomplishment thus far?
    - Is there any equipment that needs to be replaced or reevaluated?
- ✓ Core Composting Team should also meet regularly to check in, celebrate successes, develop educational materials, measure data, etc.
- ✓ At the start of each school year, host a refresher assembly to remind all students (and teach any new students) about the importance of composting and how to properly sort their waste. Make the assembly interactive and fun! Student volunteers from the audience could be asked to demonstrate how to sort their waste.
- ✓ Continue collecting data through a waste audit and/or survey to measure and track progress (see Chapter 6: Resources).
- ✓ The DPW will send out an end-of-school survey to the Steering Committee and Core Composting Team to identify what has been succesful and areas for improvement. This information is critical and will be used to improve compost programs for all schools!
- ✓ Custodial and kitchen staff should be trained annually on composting operations. The DPW can assist with these trainings, as necessary.
- ✓ Continue to celebrate successes and wins by sharing data and highlighting impact!

Communication Strategies to Celebrate Success

In-School Communications

- ✓ 1-page summary for the school newsletter/P.T.O newsletter that highlights impacts
- ✓ Share over morning announcements
- ✓ Include section on composting success in Back-to-School welcome packet
- ✓ Share success over student TV station or scroll across TV monitors during school news
- ✓ Letter from principal or superintendent to student families

Broader Community Communications

- ✓ Press releases and articles to Brookline TAB or other local media
- ✓ School Committee updates to Select Board and/or Town Administrator
- ✓ DPW social media accounts or social media of local environmental advocacy groups (ie. Brookline Mothers Out Front)
- ✓ Update school and Town websites with compost program information
- ✓ DPW can post to Soofa signs (smart digital displays within Brookline's commercial districts)
- ✓ DPW can email all Town Meeting Members via a listserv
- ✓ Include summary in community newsletter prepared by the Town's Office of Diversity, Inclusion, and Community Relations
- ✓ Town News Portal
- ✓ Present updates at School Committee meetings or other Town board/committee public meetings (i.e. the Solid Waste Advisory Committee)

FUTURE GOALS 5

It is the DPW's primary goal to support Brookline Public Schools in developing a self-sustainaing compost program in which the community is engaged and empowered. Building a system in which students and staff can educate and train their peers, and establishing cultural expectations that composting is "standard behavior" will ensure the longterm viability and success of your program.

Once your school has an established composting program and operations are running smoothly, we recommend considering how you can further expand your program. The goals listed below include additional locations to consider composting within your school, opportunities to further reduce waste, as well as a suggestion to "close the loop" and utilize the finished compost on school grounds. Several of the goals listed below are aspirational while others are more easily implemented. We encourage you to work with your Compost Steering Committee and the DPW's Zero Waste Program to explore what is possible for your school!

Expand Composting Efforts

- ✓ Provide all classrooms with a countertop compost bin to collect uneaten snacks or other food waste/compostable materials.
- ✓ Place compost receptacles in the bathroom (for hand towels only).
- ✓ Provide compost receptacles at school events with food, such as end of year celebrations and the High School's freshmen orientation barbeque. Ensure waste receptacles are monitored during events to minimize contamination!
- ✓ BHS Specific Considerations:
    - ✓ Compost in Culinary Classrooms
    - ✓ Compost in the Student Café

Waste Reduction Goals

- ✓ Minimize use of disposable/single-use packaging for food items. Avoid packaging wherever possible (ie. use bulk condiment pumps instead of packaged condiments, or work with Food Service staff to create a salad bar) or convert to BPI-certified compostable packaging.
- ✓ Work with your kitchen manager to identify opportunities to reduce food waste (ie. are you ordering too much of an unpopular food item? Can portion sizes be smaller?).
- ✓ Establish a designated "food rescue" fridge to store perishable (non shelf-stable) items.
- ✓ Host a zero-waste or reduced-waste school event. Set a waste diversion goal and measure and celebrate waste diversion success!
- ✓ Buy items that are recyclable, compostable and contain recycled content wherever possible.

Establish a Closed-Loop System

- ✓ Work with the DPW Zero Waste Program to receive finished compost from Black Earth Compost, and implement a seed-to-fork school garden program. Use the finished compost in garden beds and encourage students to grow, harvest and prepare their own food!

RESOURCES

6

To support Brookline Public Schools in launching composting programs and executing strategies outlined in this guide, the DPW has compiled the following list of pre-prepared materials and resources. While some materials were developed by DPW staff, others were created by School Compost Guide advisors and members of the Brookline Public School community. We encourage you to puruse and utilize these resources! All resources can be found online at www.brooklinema.gov/schoolcomposting.

List of Resources

A. Waste Audit Instructions

B. "Do You Know Your Compost?" Survey

C. Waste Reduction Pledge and Certificate

D. Template Letter to Administration

E. School Compost Guide "At a Glance" Summaries for Teachers, Students, and Administrators

F. Composting F.A.Q.

G. Waste Station Signage

H. Back-of-House Multilingual Signage (English, Spanish, Haitian Creole)

I. Black Earth Compost: Accepted Materials Guide

J. Community Volunteer Memo Examples

K. Educational Books (Sorted by Grade)

L. Educational Videos (Sorted by Grade)

M. Composting Glossary

Online Resources

- Video Tour of Black Earth Compost Facility: https://www.youtube.com/watch?v=nwiwYYwtG-k
- Recycling Sorting Facility Video Tour: https://www.youtube.com/watch?v=NOHlPfI3c90
- Brookline High School Waste Sorting Video, developed by Brookline High School students and BHS parent, Jon Stahl: www.brooklinema.gov/schoolcomposting

A.
Waste Audit Instructions

How to Run a Basic School Cafeteria Waste Audit

A basic waste audit is a good way to find out how much waste is going from the school cafeteria to the incinerator. It will give you baseline data that can be used to measure how successful you are when, later on, you separate liquids, organics, and recyclables out of the trash.

What you need:

- Excel spreadsheet or paper recording sheets (and a clipboard)
- Scale – the DPW can provide a luggage scale for you to use
- Large tub with handles – the tub is for holding each bag of trash while you're weighing it
- Trash barrel on wheels for transporting bags of trash
- Gloves (either disposable or work)
- (Optional) Phone to record the event or for entering data

Where to have the audit:

- The school cafeteria is the obvious place because that's where the students are and where the trash is
- Alternative locations: Outside the main door of the school? In the science room?

Working with the custodian(s) and collecting the trash for weighing:

- Make sure the custodians know what you're up to. They are great at getting the trash emptied during and after every lunch. If they know the plan, they can set the trash aside for you to weigh when you're ready. The custodian will appreciate if, when you're finished, you return the trash to a designated spot near the dumpster so they can dispose of it.
- It's best to weigh the trash at the end of the meal when all the tables have been cleared.

Weighing and recording with a luggage scale

- Weigh the empty tub first so you can allow for its weight in the tally.
- Put a bag of trash in the tub, pick up the tub (hooking it onto the scale), and record its weight minus the weight of the tub.
- Record and repeat until you've weighed all the bags of trash.

Cleanup:

- Take all those bags of trash back to the agreed upon area near the dumpster. Alert the custodian(s) that they are there so they can be disposed of properly and in a timely manner.

How to Run a Detailed School Cafeteria Waste Audit

A detailed waste audit is a good way to find out what is actually in the cafeteria waste stream and how much of it can be diverted from incineration.

What you need:

- Excel spreadsheet or paper recording sheets (and a clipboard)
- Scale - the DPW can provide luggage scales for you to use
- Large tub with handles - the tub is for holding each bag of trash while you're weighing it
- Trash barrel on wheels for transporting bags of trash
- Gloves (either disposable or waterproof work)
- Phone to record the event and/or for entering data
- 3 waterproof, 9'x12' tarps
- 3 barrels or buckets to collect compost, recyclables, and trash
- Tongs or grabbers for those sorting
- Scoop shovel
- Straw broom and dust pan for clean up
- Extra trash bags

Where to have the audit:

- Give yourself plenty of space. Outside in front of the school (weather permitting - no precipitation or wind) is a good site because it creates attention and gives onlookers room to note what is going on.

Working with the custodian(s) and collecting the trash for weighing:

- Make sure the custodians know what you're up to. They are great at getting the trash emptied during and after every lunch. If they know the plan, they can set the trash aside for you. The custodian will appreciate if, when you're finished, you return the trash to a designated spot near the dumpster so they can dispose of it.
- It's probably best to conduct the detailed audit after school when you have more time.

Weighing and recording of the total trash before separation with a luggage scale:

- Weigh the empty tub first so you can allow for its weight in the tally.

- Put a bag of trash in the tub, pick up the tub (hooking it onto the scale), and record its weight minus the weight of the tub.
- Record and repeat until you've weighed all the bags of trash.

Separating the waste into three piles:

- Lay out the 3 waterproof tarps.
- Empty all the trash bags onto one of the tarps.
- Using gloved hands and tongs/grabbers pull out the trash and the recyclables and put them in separate piles on the remaining tarps. The organics/compost will remain on the original tarp.
- You will have three piles: organics/compost, recyclables, and trash.

Weighing and recording of organics/compost, recyclables, and trash:

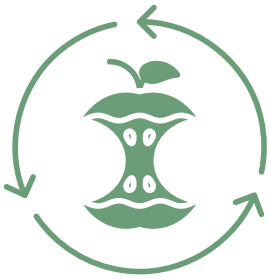
- Use the shovel to load the buckets or barrels with the organics/compost for weighing and recording.
- Similarly, weigh and record the recyclables and then the trash.

Cleanup:

- Use the extra trash bags to collect all the refuse.
- Use the brooms and dust pan to be sure the area is cleaner than when you started.
- This is often a good time to pick up any litter in the area as well.
- Take all those bags of trash back to the agreed upon area near the dumpster. Alert the custodian(s) that they are there so they can be disposed of properly and in a timely manner.

B.
"Do You Know Your Compost?" Survey

DO YOU KNOW YOUR COMPOST?



I am a... (circle one)

Student Teacher Administrator Custodial/Kitchen Staff Other

Part 1: Read each statement and circle your response

I compost at home

Never Sometimes Always Not Applicable

I understand what composting is

Never Sometimes Always Not Applicable

During lunch, when I sort my waste, I know what goes into the composting bin

Never Sometimes Always Not Applicable

I know what happens to the food in the compost bin

Never Sometimes Always Not Applicable

My friends and I are careful not to throw plastic in the compost bin

Never Sometimes Always Not Applicable

I check the signage in the cafeteria or ask a waste station monitor if I'm unsure what to put into the compost bin

Never Sometimes Always Not Applicable

Part 1: Read each statement and circle your response

Napkins are compostable at school

True False

Plastic wrap is compostable at school

True False

You can compost meat, bones, and dairy at school

True False

Changing food waste into soil takes several weeks or months

True False

Worms are decomposers

True False

Soil is made out of organic material

True False

People who live in apartments can't compost

True False

C.
Waste Reduction Pledge & Certificate

WASTE REDUCTION PLEDGE

I, _____, pledge to produce less waste by:

☐ Shopping Smart

I will (choose at least 3 of the following)...

- o Check my refrigerator and pantry before I shop. Buy only what I need
- o Bring my own reusable bag and produce bags
- o Buy produce that isn't individually packaged
- o Support local farms by visiting my town's farmers market
- o Plan my meals out
- o Avoid buying plastic water bottles
- o Bring my own reusable dishware to cafes

☐ Composting at Home

- o My family subscribes to Black Earth Compost
- o My family composts in their backyard
- o My family is learning about the benefits of composting

☐ Reusing More

I will (choose at least 3 of the following)...

- o Use glass or metal straws
- o Carry a reusable water bottle
- o Repurpose household items before getting rid of them
- o Use reusable dish towels rather than paper towels
- o Reuse plastic grocery bags as trash bags

☐ **Donating**

I will (choose at least 1 of the following)…

- o Donate clothing in good condition to local thrift shops
- o Donate household items

☐ **Recycling**

- o Clean out containers so they can get recycled
- o Use the towns textile recovery program to recycle clothing in any condition
- o Buy items that can be recycled

☐ **Encouraging my neighbors, friends, and family to reduce their waste at home!**

Thank you for pledging to reduce your waste!

_____

(Sign your name)

Return this form to you school to receive a certificate!

Zero Waste Hero

Waste Reduction Pledge Certificate

Proudly presented to

_____

In recognition of your pledge to reduce waste and support a more sustainable Brookline.

_____

Department of Public Works - Zero Waste Program

Kevin Johnson | Alexandra Vecchio | John King
Katie Weatherseed | Chaimaa Medhat

DPWorks

D.
Template Letter to Administrators

[Name of School Principal] [Date]
[Name of School]
[Address of School]

Dear [name of school principal],

My name is [name] and I am a [insert year in school]. I am writing to you on behalf of [student group(s)/the student body] to discuss what we can do to make our school more environmentally friendly in the face of the climate crisis. Climate change impacts the environment as we know it and presents a public health issue that can greatly affect our community. Schools provide safe, accessible places for students to learn and work to address these issues.

Each day after lunch, trash bins are filled with food scraps. This food waste then is incinerated, where it generates greenhouse gases that accelerate the rate of climate change. In fact, food waste accounts for approximately 25% of solid waste disposed of in Massachusetts. Composting diverts this waste from incineration/landfill and instead adds nutrients back to the soil. Compost can then be used to grow more food, creating a closed loop system.

Composting also has many benefits for [school name]. It can create greater learning opportunities both inside and outside the classroom in multiple classes, such as environmental science, chemistry, and biology. It also instills responsibility, teamwork, and stewardship, and establishes our school as an institution that is advocating for its students' futures.

In order to protect students' health and address climate change, we urge you to support the implementation of a composting program at [school name]. Composting is currently being carried out in schools around Massachusetts and is a feasible and economical approach to making our schools more environmentally friendly.

In 2022, Brookline's Department of Public Works (DPW) created a School Compost Guide to support Brookline Public Schools in launching and/or expanding composting programs. This Guide contains a detailed implementation plan, along with a variety of resources for schools to use. I firmly believe that, with the support of the DPW, we can implement a successful composting program here at [school name].

Launching a compost program is a necessary step towards becoming a more sustainable institution and can create a pathway toward even larger sustainability achievements. I respectfully request that you meet with [student group(s)/names of people interested in launching a composting program] to discuss the possibility of implementing a school composting program at [school name].

Thank you for your time. Please let me know when you might be available to meet. I look forward to continuing this conversation and discussing how we can further reduce [school name]'s carbon footprint through composting.

Sincerely,

[Your name(s)]

E.
School Compost Guide
"At a Glance" Summaries

SCHOOL COMPOST GUIDE AT A GLANCE:
Teachers & Paraprofessionals

What is the School Compost Guide?

The School Compost Guide is intended to serve as a detailed implementation plan to support Brookline Public Schools in launching and/or expanding composting programs in partnership with the Department of Public Works (DPW).

What is Composting & Why is it Important?

- Composting is the process of recycling organic matter, such as leaves and food scraps, into fertilizer to enrich the soil.
- In MA, over 1 million tons of organic material are sent to landfill or burned at the incinerator each year.
- Composting reduces greenhouse gas emissions and combats climate change.

ACTION ITEMS

Want to Launch a Compost Program at Your School?

- **Read the School Compost Guide** and check out the pre-composting checklist on pages 4-6 (available at www.brooklinema.gov/schoolcomposting).
- **Speak to your peers and colleagues about a compost program** and seek out others in your school's community who are supportive of the idea.
- **Notify the DPW Zero Waste Program** at zerowaste@brooklinema.gov to inform staff of your interest in launching a composting program.

Want to Support an Existing Compost Program at Your School?

- Compost is an interdisciplinary topic and is applicable to numerous school subjects. **Incorporate composting into your lesson plans** wherever possible.
- The Guide includes **lists of books, videos and songs about compost, climate action and sustainable food systems for each age group** (download the list at www.brooklinema.gov/schoolcomposting). Integrate these educational resources into your advisory or morning meetings through interactive read alouds, or play songs during lunches and/or snack times for younger grades.
- Funding for **field trips to a Black Earth Compost facility** may be available. Email zerowaste@brooklinema.gov to enquire!
- Whenever possible, monitor waste stations while on lunch duty and support students as they sort their waste. Encourage teachers to **integrate composting activities and resources into the classroom.**
- **Consider joining your School's "Compost Steering Committee"**, or the group of staff and students that are overseeing and coordinating the development of a compost program! Contact zerowaste@brooklinema.gov to learn more.

DPWorks

SCHOOL COMPOST GUIDE AT A GLANCE: *Students*

What is the School Compost Guide?

The School Compost Guide is a resource to help Brookline Public Schools launch or expand composting programs in partnership with the Department of Public Works (DPW).

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- Composting reduces greenhouse gas emissions and combats climate change.

ACTION ITEMS

Want to Launch a Compost Program at Your School?

- **Read the School Compost Guide** and check out the pre-composting checklist on pages 4-6 (available at www.brooklinema.gov/schoolcomposting).
- **Speak to your friends and teachers about a compost program** and seek out others in your school's community who are supportive of the idea.
- **Email the DPW Zero Waste Program** at zerowaste@brooklinema.gov to inform staff of your interest in a composting program.

Want to Support an Existing Compost Program at Your School?

- **Join your school's "Core Composting Team"**, or the group of students working to educate and engage the school community around composting.
- **Lead by example** - your friends are more likely to compost if they see you doing it!
- **Consider serving as a waste station monitor** during lunch and help other students sort their waste. Ask a teacher how you can get involved.
- **Consider joining your school's "Compost Steering Committee"**, or the group of staff and students that are overseeing and coordinating the compost program! Contact zerowaste@brooklinema.gov to learn more.

SCHOOL COMPOST GUIDE AT A GLANCE: *Administrators*

What is the School Compost Guide?

The School Compost Guide is intended to serve as a detailed implementation plan to support Brookline Public Schools in launching and/or expanding composting programs in partnership with the Department of Public Works (DPW).

What is Composting & Why is it Important?

- Composting is the process of recycling organic matter, such as leaves and food scraps, into fertilizer to enrich the soil.
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ACTION ITEMS

Want to Launch a Compost Program at Your School?

- **Read the School Compost Guide** and check out the pre-composting checklist on pages 4-6 (available at www.brooklinema.gov/schoolcomposting).
- **Speak to your peers and colleagues about a compost program** and seek out others in your school's community who are supportive of the idea.
- **Notify the DPW Zero Waste Program** at zerowaste@brooklinema.gov to inform staff of your interest in launching a composting program.

Want to Support an Existing Compost Program at Your School?

- **Consider joining your school's "Compost Steering Committee"**, or the group of staff and students that are overseeing and coordinating the compost program! Contact zerowaste@brooklinema.gov to learn more.
- **Encourage teachers and paraprofessionals who are on lunch duty to help monitor waste stations** when possible and support students as they sort their waste.
- Work with the DPW to **incentivize students to sort their waste properly and serve as waste station monitors** in the lunchroom.
- **Announce reminders about the composting program** to the student body throughout the year.
- Encourage teachers to **integrate composting activities and resources into the classroom.**
- **Recognize "composting leaders"** in your school community and **celebrate your school's waste diversion accomplishments**. The Guide includes a list of suggested communication strategies to celebrate success (page 24).

DPWorks

F.
Composting F.A.Q.

SCHOOL COMPOSTING F.A.Q.

What is compost? A nutrient-rich soil that is created when organic materials like food scraps are allowed to decompose.

What can you compost? Black Earth Compost accepts all food scraps and certified compostable serviceware. This includes dairy products, meat/bones, fruit, vegetables, tea bags, food-soiled paper napkins and towels, and plates/utensils/packaging that are certified compostable. They do not accept waxed cardboard, milk cartons, paper cups, or similar items. A complete list of the materials that Black Earth Compost accepts can be found in Appendix I. All waste station signage prepared by the DPW will indicate what can go into each lunchroom bin.

What is certified compostable serviceware? Black Earth Compost only accepts BPI, CMA, and TUV certified products, which means these products have gone through a rigorous testing process and have been confirmed to break down completely in a commercial compost facility.

Where does our compost go? The Town's organics are collected by Black Earth Compost - a local industrial-scale composting company. Black Earth Compost has three facilities in Massachusetts - Groton (their premier facility which receives most of Brookline's compost), Framingham and Manchester-by-the-Sea.

Can you compost meat and dairy? Yes! Black Earth Compost uses industrial-scale composting that gets much hotter than backyard composting allowing you to compost meat, bones, and dairy.

Does composting make a difference? Food waste sent to landfills produces methane, a greenhouse gas 86 times as potent as CO2! Composting is a sustainable cycle. Food waste gets made into rich compost, which is used in our communities to grow more food. This process will help to remove over 1 million tons of food waste from the waste stream in Massachusetts every year!

Is compost smelly? Well-managed compost should not smell or cause odors. Custodial staff will remove compost as well as other waste from the lunchroom in a timely manner. Kitchen and lunchroom compost will be consolidated into large bins outdoors that will be collected weekly.

What methods of composting are there? There are two categories, anaerobic (without oxygen) and aerobic (with oxygen). Anaerobic composting typically involves the use of an anaerobic digester, which creates a rich soil amendment and generates gas that can be turned into electricity. In aerobic composting, aerobic microorganisms break down organic matter and produce a nutrient-rich fertilizer. Aerobic composting is much more common - Black Earth Compost, for example, uses aerobic composting methods.

G.
Waste Station Signage

COMPOST

ALL FOOD SCRAPS

FRUIT

SANDWICHES

VEGGIES

MEAT & BONES

PIZZA & PASTA

DAIRY

PAPER PRODUCTS & COMPOSTABLE DINING WARE

COMPOSTABLE CONTAINER

NAPKINS

COMPOSTABLE TRAY

COMPOSTABLE UTENSILS

NO CONDIMENT PACKETS

NO PLASTIC WRAPPERS

NO COFFEE CUPS

MUDDY RIVER A PART OF BOSTON FOUNDED 1630
BROOKLINE
INCORPORATED
1705

DPWorks

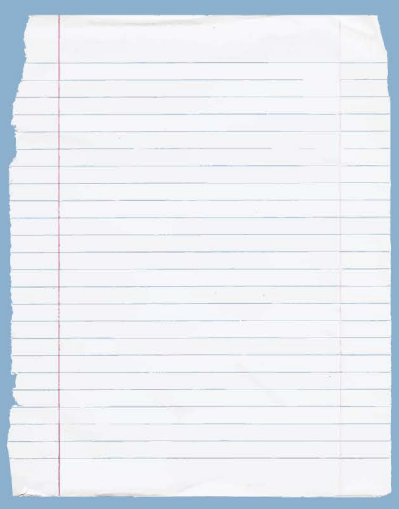
RECYCLE

CLEAN MATERIAL ONLY

GLASS

METAL CANS

PAPER BAGS



PAPER

SANDWICH CONTAINER

PLASTIC FRUIT CONTAINERS

NO CONDIMENT PACKETS

NO PLASTIC WRAPPERS

NO COFFEE CUPS

MUDDY RIVER A PART OF BOSTON FOUNDED 1630
BROOKLINE
INCORPORATED
1705

DPWorks

TRASH

WHEN IN DOUBT TOSS IT OUT!

PLASTIC WRAPPERS

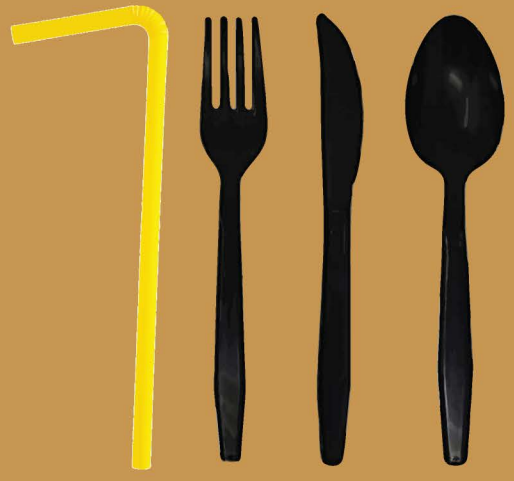
CONDIMENT PACKETS

YOGURT CONTAINERS

SOUP CONTAINERS

MILK CARTONS

COFFEE CUPS



PLASTIC UTENSILS & STRAWS

BLACK PLASTIC

DPWorks

LIQUIDS BUCKET

POUR OUT ANY EXCESS LIQUIDS BELOW

DPWorks

FOOD DONATION & SHARE TABLE

PLEASE DONATE UNOPENED & NON-REFRIGERATED FOOD ITEMS

APPLE

BANANA

ORANGE

RAISIN BOX

FRUIT CUP

CHIPS

APPLE SAUCE

CEREAL

DPWorks

H.
Back-Of-House Multilingual Signage

COMPOST

KONPÒS

FOOD SCRAPS & PAPER

RÈT MANJET AK PAPYE | LOS DESPERDICIOS DE ALIMENTOS Y PAPEL

FRUIT | *FWI* | *FRUTA*

BREAD | *PEN* | *PAN*

VEGGIES | *LEGIM* | *VERDURAS*

MEAT + BONES | *VYAN AK ZO*
CARNE Y HUESOS

DAIRY | *LETYE* | *LÁCTEO*

NAPKINS | *SERVILLETAS*
SÈVÈT

NO:
NON

FACE MASKS
MASCARILLAS

GLOVES
GANT
GUANTES

BREAD CLIPS
LAJAN PEN
CORBATA DE PAN

CONDIMENT PACKETS
PAKÈ KONDIMAN
PAQUETES DE CONDIMENTOS

STICKERS
PEGATINAS

PLASTIC WRAPPERS
VILE PLASTIK
ENVOLTURA DE PLÁSTICO

DPWorks

I.
Black Earth Compost: Accepted Materials Guide

What Can I Put in My Black Earth Compost Bin?

YAY!

Food Waste

- COFFEE GROUNDS & FILTERS
- BPI, CMA, OK Compost CERTIFIED COFFEE PODS*
- NONSYNTHETIC TEA BAGS (okay to incl. staple)
- EGGS & EGGSHELLS
- MEAT & SEAFOOD (incl. bones, shells, & raw)
- LOBSTER SHELLS (makes the compost rich)
- FRUITS & VEGGIES (incl. stems, skins, pits, seeds, corn cobs, fruit from trees) (stickers removed)
- DAIRY (cheese, yogurt, etc.)
- PASTA, GRAINS & BREAD
- COOKIES, CAKE & CANDY
- NUT & COCONUT SHELLS
- COOKING OIL & GREASE (Liquid goes in a non glass container. Leave on top of the bin to be poured out by driver. Solid fat place directly in the bin.)

Household Items

- WOOD (toothpicks, popsicle sticks, chopsticks, sawdust, small wood fruit containers)
- STOVE, GRILL & FIREPLACE ASH (please tie off bag)
- COTTON BALLS (no bodily fluids)
- WINE CORKS (cork, not plastic!)
- PET FOOD
- PET WASTE FROM RABBIT, CHICKEN, GUINEA PIG, HAMSTER & BIRD (incl. bedding) (no dog or cat)
- HAIR, FUR (human & animal)
- HOUSE PLANTS & FLOWERS
- LEAVES & GARDEN WASTE (with purch. of stickers) (no grass or sticks over 1" dia.)
- PUMPKIN (remove candle and decorations, one per pick up, place on top of bin)

Food Soiled Paper & Compostables

Clean paper and cardboard are better recycled. We take the following items that are food soiled, but not chemical or cleaner soiled.

- NAPKINS & PAPER TOWELS (incl. bleached) (used on food or w/ organic certified household cleaner)
- COMPOSTABLE TABLEWARE: CUPS, PLATES, UTENSILS, ETC. (MUST be certified compostable*)
- TISSUES (no bodily fluids incl. nasal mucus)
- EGG CARTONS & PAPER TOWEL TUBES
- NEWSPAPER for wrapping food (recycle otherwise)
- CARDBOARD BOXES (for lining bin, please recycle otherwise, tape & labels removed)
- CERTIFIED COMPOSTABLE Pizza Boxes*

NAY!

Packaging

- ABSOLUTELY NO PLASTIC: cups, containers, food & candy wrap, chip bags, shopping bags, garbage bags, produce bags, plastic wrap, cellophane etc.
- ABSOLUTELY NO CARTONS: milk, juice, ice cream, shelf-stable cream, broth & soup containers (they have hidden plastic & foil components)
- NO PRODUCE STICKERS, RUBBER BANDS, TIES & ALL PRODUCE & MEAT PACKAGING
- NO MEAL BOX INSULATION
- NO BIODEGRADABLE PACKING PEANUTS
- NO TAKE OUT CONTAINERS & CUPS (most are not compostable, check if certified compostable*)

Household Items

- NO BODILY FLUID (blood, mucus, snot)
- NO USED COMPOSTABLE DIAPERS (sorry!)
- NO DOG or CAT WASTE (incl. cat litter)
- NO DEAD ANIMALS
- NO GRASS CLIPPINGS (subscribe to an approved organic yard care partner and we can take it!)
- NO LAUNDRY LINT & DRYER SHEETS
- NO TEXTILES (recycling is available with sticker)
- NO DENTAL FLOSS, Q-TIPS, SANITARY PRODUCTS
- NO CHRISTMAS TREES or WREATHS

Paper

- NO SHREDDED PAPER
- NO MAIL, ENVELOPES, SHINY PAPER, MAGAZINES, CEREAL BOXES (due to colored ink & plastics)
- NO PLASTIC or WAXED CARDBOARD
- NO WAX or PARCHMENT PAPER (unless certified*)
- NO CHEMICALLY-SOILED PAPER (baby & disinfectant wipes, paper used w/ chemical cleaners, house paint, machine oil, etc.)

***Compostable products must be BPI, CMA, or OK Compost certified. Items that say biodegradable, compostable or ASTM-6400 alone are NOT accepted. Look for these logos, check the search tool on each website, or contact the product company if unsure.

J.
Community Volunteer Memo Example

SCHOOL LUNCHROOM COMPOSTING

VOLUNTEER MEMO 2022

BROOKLINE HIGH SCHOOL

Compost Monitor Information

Arrival:

- Arrive at least 5-10mins before lunch begins
- Finding parking can be difficult so, please consider walking, biking, or taking public transport
- Enter through the main entrance of the STEM building (red arrow on map). Head to the main cafeteria
- No need to sign in at the main office
- Grab gloves + name tag, located on the round table under the main stairs of the STEM Building
- Look through all 10 bins (5 bins in main caf. 5 in common space)
    - Sort out any contamination from compost and recycling
    - When in doubt toss it out (in the trash bin)!

During Lunch:

- Station at least 1 volunteer in the main cafeteria and 1 in the STEM building common space (highlighted in yellow on the map)
- As students come up to dispose of their waste, educate them on proper separation methods
- Collect any uneaten non-perishable food for donation (i.e. fruits, apple sauce, cereal)
- Periodically check compost and recycling bins for contamination
- Help stack reusable trays

After Lunch:

- Check tables for any food waste or recyclable material left behind
- Do one final sweep of all 10 waste stations

Town of Brookline
Department of Public Works
870 Hammond Street
Chestnut Hill, MA, 02467
617-879-4900

DPWorks

Recycling and Composting Basics

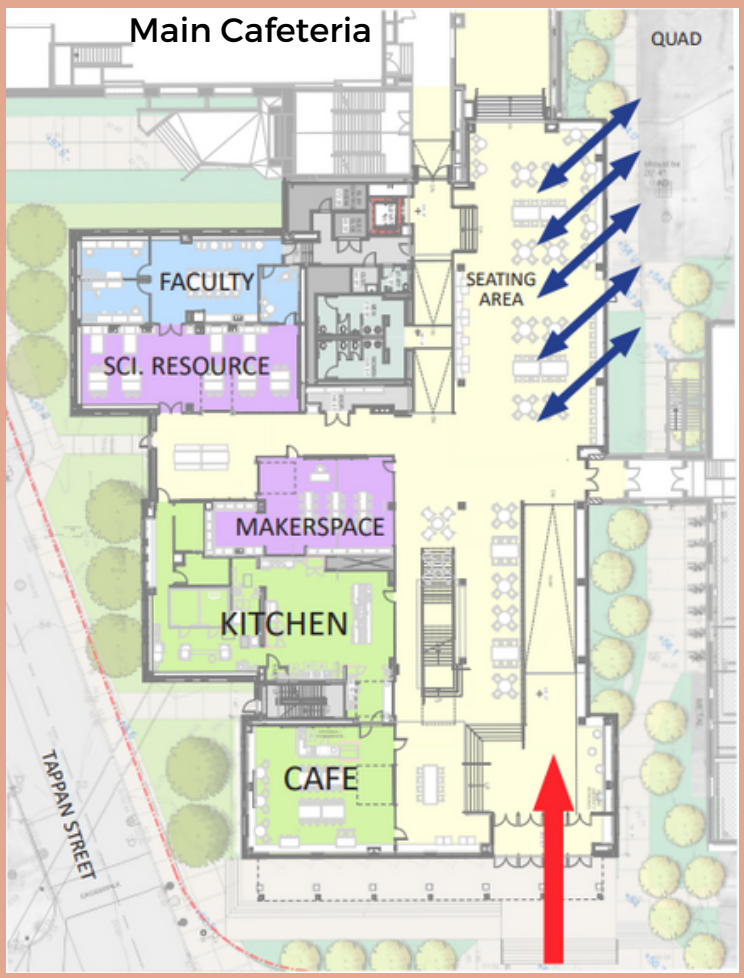
Recycling:

- Clean, food residue-free plastic containers
  - Sandwich containers
  - No salad containers (Too much food residue)
- ✗ No milk or juice cartons (trash bin only)
- ✗ No straws, plastic utensils, or black plastic

Composting:

- Fruits + Vegetables
  - Remove produce stickers
- Napkins and food-soiled paper
- Compostable serviceware
  - Check to make sure it's BPI certified!
- All food scraps (including eggs, meat & dairy)
- ✗ No paper coffee cups (they are lined with plastic)
- ✗ No liquids (add to liquid bucket)
- ✗ No ketchup + dressing packets (trash bin only)

When in doubt toss it out (in the trash bin)



BHS Lunch Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Lunch A 11:20 am-11:50 am Lunch B 12:24 pm- 1:00 pm	Lunch A 11:20 am-11:50 am Lunch B 12:24 pm- 1:00 pm	Lunch A 11:45 am-12:15 pm Lunch B 12:45pm- 1:15 pm	Lunch A 11:20 am-11:50 am Lunch B 12:24 pm- 1:00 pm	Lunch A 11:20 am-11:50 am Lunch B 12:24 pm- 1:00 pm

CONTACT INFORMATION
Chaimaa Medhat, Asst. Recycling Coordinator
Cmedhat@brooklinema.gov
Cell: 617-879-4914

K.
Educational Books (Sorted by Grade)

READING LIST

BOOK TITLE	AUTHOR	GRADE RANGE	TOPIC
Pre - K & Kindergarten			
Green Green: A Community Gardening Story	Marie Lamba, Baldev Lamba	K	Urban gardening
Don't Throw That Away!: A Lift-the-Flap Book about Recycling and Reusing (Little Green Books)	Lara Bergen	K	Recycling/Repurposing
Up in the Garden and Down in the Dirt	Kate Messner	K	Organisms/animals in soil and garden
Before We Eat: From Farm to Table	Pat Brisson	K	Overview of food systems (what must happen before food gets on table)
I Can Save the Earth!: One Little Monster Learns to Reduce, Reuse, and Recycle	Alison Inches	K	What kids can do to be more eco-friendly (includes recycling)
Recycling Is Fun (My Little Planet)	Charles Ghigna	K	Recycling
I Am Earth: An Earth Day Book for Kids	James McDonald	K	Basic concepts of Earth science while also encouraging the importance of recycling resources
Years 1 & 2			
Under Your Feet... Soil, Sand and Everything Underground	Royal Horticultural Society	1-2	Organisms in soil and experiments using dirt from your own backyard
What's Sprouting in My Trash?: A Book about Composting	Esther Porter	1-2	Composting
Earth Day Every Day	Lisa Bullard	1-2	How to reduce/reuse/recycle
Compost Critters	Bianca Lavies	1-2	Organisms in soil
Not For Me, Please!: I Choose to Act Green	Maria Godsey	1-2	Zero waste and refusing

Where Does the Garbage Go? (Let's-Read-and-Find-Out Science 2)	Paul Showers	1-2	Waste management/Waste sorting
What a Waste: Trash, Recycling, and Protecting our Planet	Jess French	1-2	Waste management/ Recycling
One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia	Miranda Paul	1-2	Waste management/Single use plastics & recycling
The Mess That We Made	Michelle Lord	1-2	Impact of plastic on ocean/marine life
Magic Trash: A Story of Tyree Guyton and His Art	J. H. Shapiro	1-2	Recycling, environmental art, community
Recycling Is Fun (My Little Planet)	Charles Ghigna	1-2	Recycling
Save the Scraps (Save the Earth)	Bethany Stahl	1-2	Composting
Buried Sunlight: How Fossil Fuels Have Changed the Earth	Penny Chisholm	1-2	Provides overview of fossil fuels
Jayden's Impossible Garden	Mélina Mangal	1-2	Urban gardening
Buzzing with Questions: The Inquisitive Mind of Charles Henry Turner	Janice N Harrington	1-2	Story of Charles Henry Turner, the first Black entomologist - a scientist who studies bugs
Jayden's Impossible Garden	Mélina Mangal	1-2	Urban gardening
Earth Day Every Day	Lisa Bullard	1-2	How to reduce/reuse/recycle
Compost Critters	Bianca Lavies	1-2	Organisms in soil
Old Enough to Save the Planet	Loll Kirby	1-2	Young climate change activists who are changing the world
Dirt, Rotten, Dead	Jerry Emory	1-2	Cycle of digestion and decay
Cast Away: Poems of Our Time	Naomi Shihab Nye	1-2	The things we cast away, from plastic water bottles to those less fortunate

Buzzing with Questions: The Inquisitive Mind of Charles Henry Turner	Janice N Harrington	1-2	Story of Charles Henry Turner, the first Black entomologist -- a scientist who studies bugs
Why Should I Recycle?	Jen Green	1-2	Importance of recycling
Josie and the Trouble with Trash	Beth Handman	1-2	Recycling and impact of plastics on oceans
Years 3 - 5			
Seedfolks	Paul Fleischman	3-5	Urban gardening
This Class Can Save the Planet	Stacy Tornio	3-5	Environmental actions kids can take
One Earth: People of Color Protecting Our Planet	Anuradha S Rao	3-5	Profiles twenty environmental activists of color from around the world
I Am Farmer: Growing an Environmental Movement in Cameroon	Miranda Paul	3-5	True story of how environmentalist Farmer Tantoh is transforming the landscape in his home country of Cameroon.
Years 6 - 8			
Taking on the Plastics Crisis	Hannah Testa	6-8	Youth activist Hannah Testa shares with readers how she led a grassroots political campaign to successfully pass state legislation limiting single-use plastics and how she influenced global businesses to adopt more sustainable practices.
The Omnivore's Dilemma: Young Readers Edition	Michael Pollen	6-8	Sustainable food systems
How to Change Everything: The Young Human's Guide to Protecting the Planet and Each Other	Naomi Klein	6-8	An empowering, engaging young readers guide to understanding and battling climate change

High School (9-12)			
Reduce, Reuse, Reimagine	Beth Porter	9-12	Importance of recycling
Taking on the Plastics Crisis	Hannah Testa	9-10	Youth activist Hannah Testa shares with readers how she led a grassroots political campaign to successfully pass state legislation limiting single-use plastics and how she influenced global businesses to adopt more sustainable practices.
A Bigger Picture: My Fight to Bring a New African Voice to the Climate Crisis	Vanessa Nakate	9-12	Youth climate activism, the national and international barriers she has faced, and the importance of inclusive movements for climate and environmental justice
No Planet B: A Teen Vogue Guide to the Climate Crisis	Lucy Diavolo	9-12	An urgent call for climate justice using an intersectional lens - with critical feminist, indigenous, antiracist and internationalist perspectives
Parable of the Sower: A Graphic Novel Adaptation	Octavia E Butler	9-12	Graphic novel on the consequences of climate change
American Wasteland: How America Throws Away Nearly Half of Its Food (and What We Can Do About It)	Jonathan Bloom	11-12	Food waste
Waste: Uncovering the Global Food Scandal	Tristram Stuart	11-12	Food waste
The Omnivore's Dilemma: A Natural History of Four Meals	Michael Pollen	11-12	Food choices and implications on the natural world and human health

Trashed	Derf Backderf	11-12	Graphic novel on the experiences of trash collectors
Who Really Feeds the World? The Failures of Agribusiness and the Promise of Agroecology	Vandana Shiva	11-12	Disputes the idea that our current food crisis must be addressed through industrial agriculture

L.
Educational Videos (Sorted by Grade)

VIDEO LIST

VIDEO TITLE	LINK	GRADE RANGE	TOPIC
Composting for Kids	https://www.youtube.com/watch?v=dRXNo7Ieky8	K-8	Why is composting important? What is it? How to compost? Where does it go?
Save the Scraps	https://www.youtube.com/watch?v=-Wl3j9I_KWM	K-8	Animated audiobook on composting
School Cafeteria Food Scrap Composting: How Does it Work?	https://www.youtube.com/watch?v=yF9lcjR3YoY	K-8	School cafeteria composting - presented by students!
The Dirt on Decomposers: Crash Course Kids #7.2	https://www.youtube.com/watch?v=uB61rfeeAsM	4-7	Information on decomposers
Who Needs Dirt?: Crash Course Kids #27.1	https://www.youtube.com/watch?v=eCSIrlk0GTs&list=PLhz12vamHOnZv8kM6Xo6AbluwIlVpulio&index=10	4-7	Information on dirt and how plants get energy
A Crack in the Pavement: Digging In	https://www.nfb.ca/film/crack_in_pavement_digging_in/	6-12	Discusses how greening school grounds improves school communities
The Soil Story by Kiss The Ground	https://www.youtube.com/watch?v=nvAoZ14cP7Q	6-12	Discusses the importance of healthy soil for a healthy planet
It's Gotten Rotten	http://compost.css.cornell.edu/igr.html	9-12	Science of composting
Compost, Not Trash	https://www.youtube.com/watch?v=R17SYAVXH-I	All	City of Boston compost music video
Garbage into Gold	https://www.videoproject.org/Garbage-Into-Gold.html	All	Discusses community recycling programs and environmental entrepreneurs
"Dirt" The Movie	http://www.dirtthemovie.org/	All	Urban gardening
Composting for Kids	https://www.youtube.com/watch?v=YuH_R__Ljtw	All	Overview of what goes in compost

M.
Composting Glossary

GLOSSARY

Back-of-House: A term used for the kitchen and other areas where food preparation and storage takes place.

Certified Compostable: Products that have been tested and deemed compostable by certain institutes/groups. Black Earth Compost only accepts serviceware products that are BPI (Biodegradable Products Institute), CMA (Compost Manufacturing Alliance), or OK Compost Certified.

Climate Change: The long-term changes in global temperatures and weather patterns caused by human activity.

Composting: The natural process of decomposition and recycling of organic materials into a rich soil amendment known as compost.

Compost Steering Committee: A committee made up of representatives from different sectors of your school's community (administration, students, custodial staff, kitchen staff, teachers, and parents/PTO). The purpose of the committee is to ensure all stakeholders are informed, provide vital insight to inform your school's composting program, and troubleshoot issues as they arise.

Core Composting Team: A group of students who care about composting, led by faculty. Think of this team as a "composting club". The purpose of the Core Composting Team is to educate and engage the school community around composting.

Decomposition: The process by which organic materials chemically break down into simpler compounds.

Greenhouse Gases: Gases in the earth's atmosphere that trap the sun's heat, warming the planet.

Serviceware: All containers, bowls, plates, trays, cups, lids, napkins, and other items that are used to serve food or beverages.

Waste Audit: An activity that involves weighing trash generated during lunch and identifying how much waste is going to the landfill/incinerator. Waste audits can be used to track and measure the success of waste diversion efforts, such as composting.

Waste Station: A collection of receptacles where waste is sorted and collected. The DPW recommends that school waste stations include: a food rescue/share table (optional), liquids bucket, recycling receptacle, trash receptacle, compost receptacle, and tray/utensil collection area.

Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.