

TOWARD ZERO WASTE PUBLIC SCHOOLS TOOLKIT

Whatcom County

A step-by-step guide for
your public school

TOWARD
ZERO
WASTE



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Visit SustainableConnections.org for additional information such as:

- Posters and Signage
- Preferred Compostable Food Service Items
- Toward Zero Waste Event Toolkit

Thank you to Whatcom County for their support



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OVERVIEW

Reducing waste may not be the first sustainable practice that comes to mind; but experts agree better management of solid waste and its accompanying systems is crucial for protecting our environment, mitigating climate change, and using our resources more wisely. In the United States, approximately \$200 billion is spent on managing waste alone. In addition, forty percent of the food we produce is never eaten, and becomes the largest single component of waste in United States' landfills – even more than plastic and paper.

Public schools have a unique opportunity to address these problems during their daily operations. The average student wastes approximately 67 pounds of lunch packaging every school year, and almost 80% of all the waste generated by a school could be recycled or composted. Food and paper waste are the largest contributors in school waste streams, both of which can be easily captured through recycling and composting.

Through reducing the sources of waste and educating students and teachers about the importance of recycling, your school can play a critical role in keeping waste out of the landfill.

WHAT IS TOWARD ZERO WASTE?

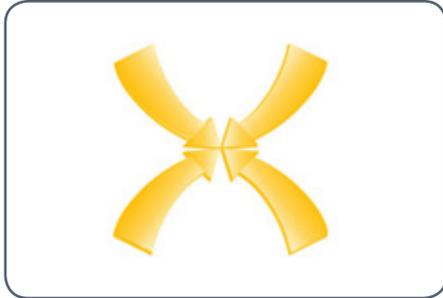
Toward Zero Waste (TZW) aims to reduce the amount of waste generated in the first place, while also increasing reuse, recycling, and composting of waste that is generated. Key components of TZW include:

1. REDUCE the amount of material needed to be disposed of by the solid waste system. This should be the first priority. The goal is not only to reduce the amount of landfill waste produced but also reduce the need for materials to be recycled or composted. Examples of ways to reduce waste include providing water refill stations instead of selling bottled water, buying products with minimal packaging, and determining accurate quantities of food needed.

2. REUSE items as many times as possible. This reduces the need to produce items in the first place, conserves resources, and keeps materials out of landfills. Recent estimates indicate Americans use nearly 4 billion pieces of disposable serving ware, for an average of less than 10 minutes, per year. Shifting to reusable serving ware whenever possible can make a huge impact.

3. RECYCLING AND COMPOSTING comes after you have done all you can to reduce and reuse. Efforts should be made to produce as little waste as possible and then to recycle or compost as much as possible. Ideally, no waste would be sent to the landfill, but that isn't always feasible. A good goal is to have less than 10% of your overall waste stream go to the landfill.

CREATE A TOWARD ZERO WASTE PLAN



1. REDUCE



2. REUSE



**3. RECYCLE AND
COMPOST**

From the beginning of creating your plan, it is important to achieve buy-in from your staff and faculty members. Ensuring they understand the importance of waste reduction will ensure the success of your plan.

Create a Toward Zero Waste Team, and empower this team to be your Toward Zero Waste Champions. Many employees are looking for ways to align their personal values with their work, and this would give them a great opportunity to do so. It is important that at least one member of your team is involved in your facilities management, food preparation, and one member from your faculty.

A Toward Zero Waste plan will include discovering the main waste sources generated at your school, any data you plan to collect and analyze, how you can reduce the sources of your waste, how you can reuse what you currently have, how to institute more efficient recycling and composting in your classrooms and cafeteria, and creative ways to educate and train your staff, faculty, and students about proper waste sorting and the importance of it.



TRACK AND ASSESS YOUR WASTE

There are numerous ways to track your waste, everything from a simple waste audit to complex software. Start with a free audit from Sustainable Connections or commit to the most thorough and revealing waste assessment process which is conducted daily over a time of approximately one month. LeanPath is one of the leading companies helping to reduce food waste and has some great free tools for tracking waste. In general, waste in public schools consists of: recyclable paper, packaging waste, back-of-house kitchen waste, and front-of-house food waste (leftover food on plates).

TRACK YOUR WASTE

1. COLLECT YOUR WASTE HAULING BILLS to confirm the cost and services you currently have. You can inquire about the cost of other available services, such as composting.

2. CONDUCT AN INITIAL WASTE AUDIT. You can request a free waste audit from Sustainable Connections, ReSources, Sanitary Service Company, or conduct your own. There are great resources available to you from the Environmental Protection Agency. This is also a great way to involve students who may be participating in school clubs such as a green team or environmental club.

3. ANALYZE THE RESULTS OF YOUR WASTE AUDIT. Identify the main sources of waste that you can improve upon. Quantify the total waste generated in each category and understand the reason for their presence. For example, if a food item is often found in the trash after being served to students, consider offering it as only an optional serving, or offer multiple options for students to choose what they want.

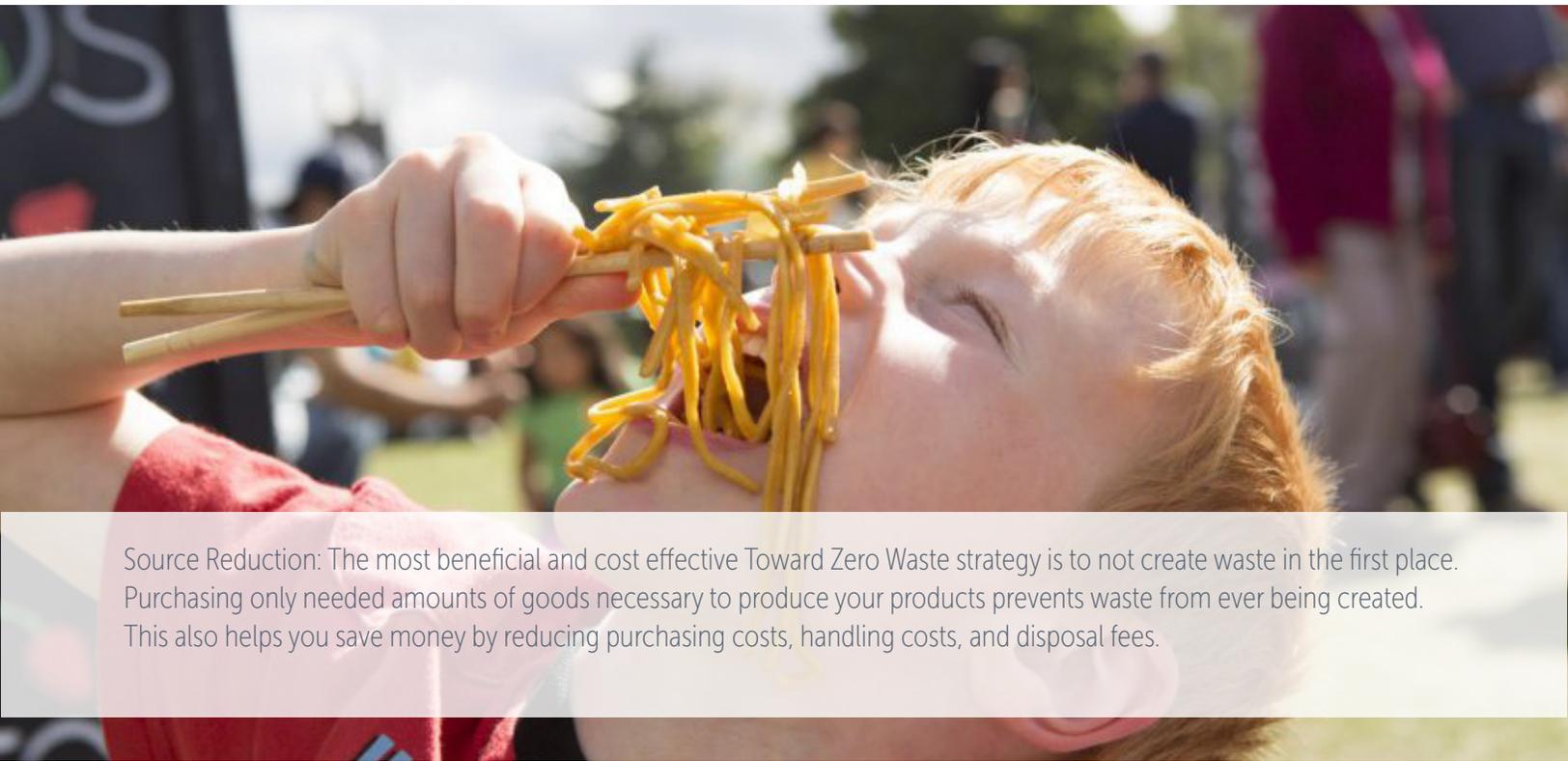
Pay attention to common items that make up the majority of your waste, and where items should end up:

- Plastic, tin, aluminum, and glass (recyclable)
- Mixed paper (recyclable)
- Film plastics: shrink wraps, clean plastic bags, the plastic securing beverage flats (recyclable)
- Cardboard (recyclable)
- Food waste (compostable)
- Food soiled paper products (compostable)
- Food soiled plastic wrap (landfill)
- Food soiled plastic bags (landfill)

4. REFINE YOUR TOWARD ZERO WASTE PLAN based upon your findings.

5. CONDUCT A FOLLOW UP WASTE ASSESSMENT after you have started implementing your plan to see how you have improved.

TIP – When you enlist Sustainable Connections, RE Sources for Sustainable Communities, or Sanitary Service Company to help conduct your waste assessment, you will receive a report to help you prioritize your actions. You will also gain valuable knowledge based upon years of experience helping businesses reduce waste. The report will include recommendations tailored to your school, and are specific to our community and available waste services.



Source Reduction: The most beneficial and cost effective Toward Zero Waste strategy is to not create waste in the first place. Purchasing only needed amounts of goods necessary to produce your products prevents waste from ever being created. This also helps you save money by reducing purchasing costs, handling costs, and disposal fees.

WASTE REDUCTION

IN THE CAFETERIA

- Do a food waste audit to identify most wasted type of food and investigate why
- Have recess before lunch to eliminate students' desire to rush through lunch for more recess time. Playing beforehand will encourage students to finish their plate instead of wasting food.
- Offer multiple options so students can choose the foods they want to eat, versus being served.
- Start composting in the school cafeteria.
- Switch to durable cups for milk instead of milk cartons and eliminate as many single use utensils as possible.

AROUND SCHOOL

- Create a paper reuse center, setting up a box where people can place paper that is only used on one side. Use this paper during tests for scratch paper, encourage students to turn in homework on the back of used paper, and use this paper during in-class activities.
- Parents and the community will appreciate a school rummage sale or trade day for outgrown clothes and unused school supplies. Donate the leftovers!
- Install water bottle refill stations and stop selling bottled water in vending machines.

TIP - Many school districts choose to pilot their Toward Zero Waste efforts at a particular school where there is existing enthusiasm from teachers, janitorial staff, students or administration. This is a great way to get things started and you can gain valuable knowledge about the best way to scale district wide.

FEED PEOPLE AND ANIMALS

The majority of waste going to landfill is food, and deserves special attention. Once you have worked hard to reduce the amount of food waste generated in the kitchen and cafeteria, the next step is to donate edible food to people and/or animals.

FEED PEOPLE

Set up a food share table at the end of the day from left-over cafeteria food, and consider donating what is not taken. Contact local food banks, soup kitchens, and faith-based organizations to determine how excess food might be donated. Sustainable Connections has a Squatch Food Waste program for taking left-over, edible, and safely-prepared food from businesses and delivering it to food relief agencies in Whatcom County. Contact us for information on how you can participate.

TIP - Many food providers worry about legal liability related to their donated food. However, the Bill Emerson Good Samaritan Food Donation Act (Public Law 104-210) protects food donors from legal liability if they donate in good faith and without gross negligence. Food donations may be tax deductible.

FEED ANIMALS

Kitchen scraps created before food is served may not be suitable for serving or donating, but relationships can be built with livestock farmers to have your food waste and kitchen scraps picked up. Delivering food to livestock is different than donating to hungry people, be aware of the challenges.

- Check with the Whatcom County Health Department to understand current regulations.
- Make sure those who accept your food waste for animal consumption are authorized to do so.
- Consistent and dependable pick up schedules are a necessity. Make sure your farmer can commit and have a backup plan for emergencies.



RECYCLE AND COMPOST

It is somewhat counterintuitive that recycling and composting are the last steps before sending waste to landfill. However, all beneficial uses of an item should be exhausted before more energy and resources are used to transform or repurpose it. Contamination refers to any items that should not be in a particular bin (a banana peel in a recycling bin would be considered contamination).

RECYCLE:

- Purchase products that are recyclable or compostable.
- Determine appropriate recycling bin placements for kitchen staff, the cafeteria, classrooms, and hallways.
- Make sure all bins are well-signed. Signage is available from Sustainable Connections.
- Flatten or compress packaging and containers whenever possible before placing in the waste hauler bins.
- Monitor frequently for contamination of waste streams. If it is occurring, determine why and make corrections.
- Staff and student recognition, awards, or school-wide incentives can really help get your Toward Zero Waste effort off the ground and keep it going strong.

COMPOST:

Whatcom County is fortunate to have a commercial composting facility centrally located and near many businesses. This keeps costs reasonable and reduces the carbon footprint of hauling compostable waste. Additionally, commercial composting facilities create more local jobs.

- Determine appropriate composting bin placements for kitchen staff, the cafeteria, classrooms, and hallways.
- Make sure all bins are well-signed. Signage is available from Sustainable Connections.
- Try to avoid using bin liners entirely, and use compostable bin liners where necessary.
- Monitor frequently for contamination of waste streams. If it is occurring, determine why and make corrections.
- If contamination is an ongoing issue conduct a staff and student training.

LANDFILL:

By following many of the steps included in this tool kit you will be able to drastically reduce the amount of waste you send to landfill. With 80% of the waste generated at schools being recyclable and compostable, the end result is significant cost savings and decreased environmental impact.

TIP – Many kitchens repurpose plastic buckets for collecting compostable kitchen waste. The 4-gallon square buckets are small enough to fit through a dishwasher or are easily washed by hand. Since food waste is heavy, smaller containers can help reduce workplace injury. Also, bin placement is key! Put them in easy to access, high traffic areas, and always pair them with the other bin available in that room. Some folks won't travel the extra five feet to dispose of waste correctly.



HIRING, TRAINING & EDUCATION

Make sure that waste reduction and the systems you use are a part of training for ALL employees. During the hiring process, look for employees who are familiar with waste reduction, whether in prior employment or at home. Include waste reduction education in the classrooms and utilize recycling games to educate children about proper waste sorting and the importance of doing so accurately. Sending information home to the parents about packing lunches with less landfill-bound packaging will also help reduce the waste generated in the cafeterias.

PROMOTION

Do not let your efforts go unnoticed! Our community supports institutions that are operating with sustainability in mind. Proudly display and promote your Toward Zero Waste efforts on social media, informational signage, at PTA meetings, or in a sustainability report. Sustainable Connections can also help you promote your good efforts with case studies and public promotion. Contact Mark (Mark@sustainableconnections.org) for more information!

SANITARY SERVICE COMPANY (SSC)

composting, recycling, and garbage
360-389-2025

<http://www.ssc-inc.com>

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