

A photograph of a beach with driftwood and a piece of clear plastic trash. The image is split vertically: the left side shows a close-up of weathered wooden logs and a piece of clear, crumpled plastic on a dark, pebbly beach. The right side is a solid orange background with white text.

PLASTIC POLLUTION

AND WHAT SCHOOLS CAN DO TO HELP

Dear Educators and Administrators,

My name is Kaia Olson, and I am writing this letter to speak to you about single-use plastic in schools. I'm going into my sophomore year of high school in Spokane, Washington. My grandparents live in the San Juan Islands, a small archipelago in northern Washington. I have been visiting the San Juans and their surrounding Salish Sea several times a year all my life, and it is so important to me that I want to live and work there as an adult. I am currently lucky enough to be interning for Friends of the San Juans, an environmental organization in the Islands. I've always been concerned with the environmental crisis, but recently a particular issue caught my attention. I have seen a steady decrease in biodiversity in the Salish Sea, and a correlated steady increase in plastic items on the beaches. Every picture in the margins was taken by me on Lopez Island, most of it in the last three weeks. Time has told of our love affair with single-use plastic-the ability to use a plastic item once and, without a second thought, throw it away. Truthfully, there is no "away."

Every year, 8 million tons of plastic finds its way into the planet's oceans (1). Besides the fact that plastic kills millions of marine organisms each year, emerging research is showing that humanity eats, drinks, and breathes it on a daily basis, causing increasingly apparent health problems (2).



Every milligram of plastic ever produced still exists, and any new plastic produced will exist for centuries to come, regardless of whether we throw it away or not. The jaw-dropping figure of 8 million tons of plastic entering the ocean each year can only get bigger as the novel COVID-19 pandemic results in increasing amount of single-use plastic entering waste streams after decades of trying to reduce plastic waste. Disposable masks are popping up on shorelines across the world. Since the pandemic began, the plastic industry has been encouraging the misconception that reusables are no longer safe and that single-use plastic is the best option moving forward. In fact, when cleaned properly, reusables are as safe as-if not safer than-single-use plastic. A study published in the New England Journal of Medicine found that the COVID-19 virus can live up to 72 hours on plastic, compared to 24 hours on paper, cardboard, and fabrics (3). Additionally, plastic contains thousands of chemicals with dangerous effects on the human body that we are only just beginning to discover. The coronavirus is a very serious short-term crisis, but plastic pollution is a no less dangerous continuing crisis, one that today's students will have to take on when they inherit the stewardship of the planet.

Getting rid of plastic entirely is not the answer. It has a place: in medicine, in space, and especially protecting thousands of medical professionals on the front lines relying on plastic PPE. Where it does not belong is facilities where alternatives are viable options, such as in schools. Many schools have facilities where reusables can be cleaned properly; according to the CDC the virus is extremely vulnerable when put through a dishwasher (4). Reusables and alternatives such as bioplastics (plastic-like material made from plants) or items made from 100% recycled material are also options.





The school system promotes collaboration, commitment to a better future, and community involvement. These ideals are universal and transferable, so let's use them in another area: reducing single-use plastic in schools. The plastic crisis is a perfect opportunity for schools to rise to the challenge and be leaders in the movement, and for students to positively change the outcome of their future, and it can be done safely even during the pandemic. We can change together.

It's easy to be overwhelmed by the plastic crisis, but the important thing to remember is that we don't need a few people going perfectly plastic-free, we need many trying. Here is a simple guide for engendering change at school:

- **Education:** learning about plastic and its alternatives and sharing that knowledge with the community (or school), is important before beginning the transition to alternatives.
- **Collaboration:** putting together a diverse team of students, educators, administrators, and even professionals or community members ensures that the movement has clear leaders through the challenge.
- **Investigation:** knowing what the most used items are is the first step to eliminating them. Supply and waste audits can highlight specific items or areas for change.
- **Action:** the final step is an ongoing one: set a goal and create a plan. Chose something specific to change and work towards that goal. Here's where having a diverse leading team is useful; when members have different skill sets and access to different resources the team can be more successful.





Change can start with a single swap, such as purchasing bamboo or compostable straws instead of the traditional plastic ones. When looking into more sustainable alternatives to plastic, it is also important to keep in mind the terminology used to describe products. “Biodegradable,” while sounding nice, holds no commitment for the product or the company. A product can be labeled biodegradable but not organically break down until the universe explodes. “Compostable” provides a slightly more specific time frame, however the word still holds some confusion. Some “compostable” items cannot be composted in the backyard pile, only in commercial facilities with special treatment. It’s important to read past the “green” labels on products in order to make the best decision for the school and the environment. Here is a quick guide for easy swaps:

- **Beverage Cups**

- Avoid: single-use plastic or plastic-coated paper ones, they are often not recycled even if they are put in the recycle bin.
- Good: disposable, compostable alternatives, such as plant-based bioplastic or items made from 100% recycled material.
- Best: reusable ceramic, metal, or robust plastic cups/mugs; opportunity to collect and wash them. Saves money and benefits the planet!

- **Cutlery**

- Avoid: single-use plastic utensils, they break into microplastics like other plastic items.
- Good: compostable alternatives, such as bioplastic or disposable bamboo, or items made 100% recycled material.
- Best: reusable metal or bamboo cutlery, collected and washed. Opportunity for reusable silverware kit for students.





- **Straws:**

- Avoid: single-use plastic straws, they are dangerous for many marine animals who accidentally ingest them.
- Good: compostable alternatives, again such as bioplastic or disposable bamboo, or items made 100% recycled material.
- Best: reusable metal, bamboo, or silicone straws. Could be part of the above stated silverware kit.

- **Lunch Trays**

- Avoid: single-use Styrofoam. Styrofoam is nearly impossible to recycle and takes up considerable space per weight in landfills.
- Good: disposable bamboo or compostable bioplastic alternatives, or items made from 100% recycled material.
- Best: reusable metal or robust plastic trays; able to be run through a dishwasher and safely cleaned before the next use.

- **Waste bins**

- Another thing to consider is having a three-bin system (compost, recycle, and landfill), and clearly marking the items that fit into each category. This system ensures that items are correctly sorted and that the maximum amount of material is kept out of landfills.

- **Waste Hierarchy**

- We are always taught to reduce, reuse, and recycle, but it's time we made a fourth and most important addition: refuse. First refuse, then reduce, then reuse, and finally recycle plastic as a last resort.

It can take a push to begin, and there are many resources to guide and inform about going single-use plastic free. A few to get started:





- **Plastic Pollution Coalition:** a global alliance of companies, organizations, and individuals working towards a plastic-free world. Their website has a section about plastic in schools, including a very comprehensive manual for schools. <https://www.plasticpollutioncoalition.org/>
- **Plastic Free July:** a global movement to be part of the solution for plastic pollution. Resource for individuals, schools, and even businesses. <https://www.plasticfreejuly.org/>
- **Break Free from Plastic:** a global wave of schools and universities going plastic-free. Exclusively for individuals and schools, helping them make their campus plastic-free. <https://www.breakfreefromplastic.org/>
- **Plastic Free Salish Sea:** A newly launched website with information related to solid waste, recycling, and how to reduce your dependence on single-use plastics. <http://www.plasticfreesalishsea.org/>

Sources Used:

1. "Marine Plastics." International Union for Conservation of Nature. <https://www.iucn.org/resources/issues-briefs/marine-plastics>. Accessed 9, July 2020.
2. Loria, Kevin. "Think You Don't Eat Plastic?" Consumer Reports, June 2020. pp. 28-34.
3. Hughes, Kristin. "Protector or polluter? The impact of COVID-19 on the movement to end plastic waste." World Economic Forum. 6, May 2020. <https://www.weforum.org/agenda/2020/05/plastic-pollution-waste-pandemic-covid19-coronavirus-recycling-sustainability/>. Accessed 7, July 2020.
4. "Cleaning and Disinfection for Households." Center for Disease Control and Prevention. Updated 10, July 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>. Accessed 10, July 2020.
5. All Photos taken by Kaia Olson on Lopez Island. 2020.

A wide-angle photograph of a rocky beach meeting a calm body of water. The sky is blue with light, wispy clouds. The shoreline is composed of smooth, grey and green rocks.