

How Plastic Affects SSSD and our Environment

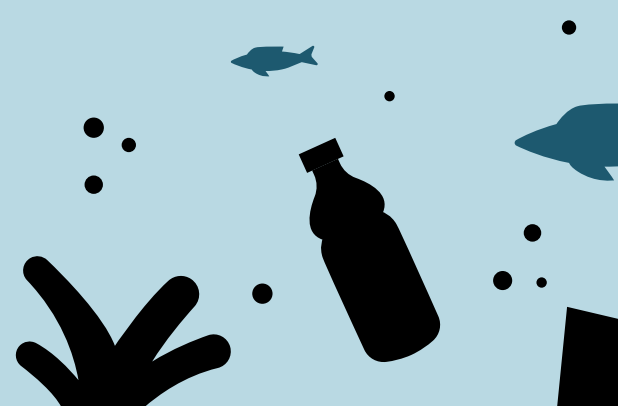
By: SPE 5th Graders

- Throwing away plastic from our cafeteria puts toxic chemicals into our ecosystem, harming our environment.
- Putting hot food in plastics melts the plastic which puts toxins in our bodies. These toxins can result in known diseases and health complications.
- There are cost effective solutions to this community supported issue.





**Single-use Plastic
is Harmful to the
Environment**



Leachate

Leachate is a highly toxic liquid made from rain water mixing with plastic in landfills.

How?

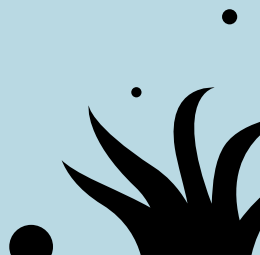
- Rain water absorbs water soluble compounds from plastics in landfills.
- Many of these compounds are highly toxic.
- Now, we have created Leachate - a dangerous liquid that harms our environment and poisons wildlife.



In 2011, our district switched to reusable kitchenware. There were ceramic bowls, heavy duty plates, and metal utensils.

According to the Steamboat Pilot this:

- **Reduced lunch waste by about 70%**
- **Reduced the number of 30-gallon trash bags from 5 to 1.5 everyday**



Let's see where we are now

**78% of kids eat hot lunch
EVERYDAY**



Amount of kids at SPE

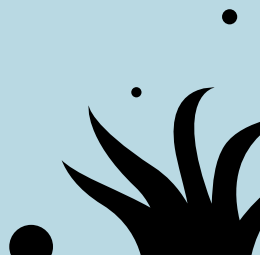
383

Kids that eat hot lunch

297

Strawberry Park alone creates
297 plus single-use plastic
containers of waste
EVERYDAY that they are used.

Thats 8-11 bags of
plastic trash
EVERYDAY!



Plastic is Harmful to our Bodies



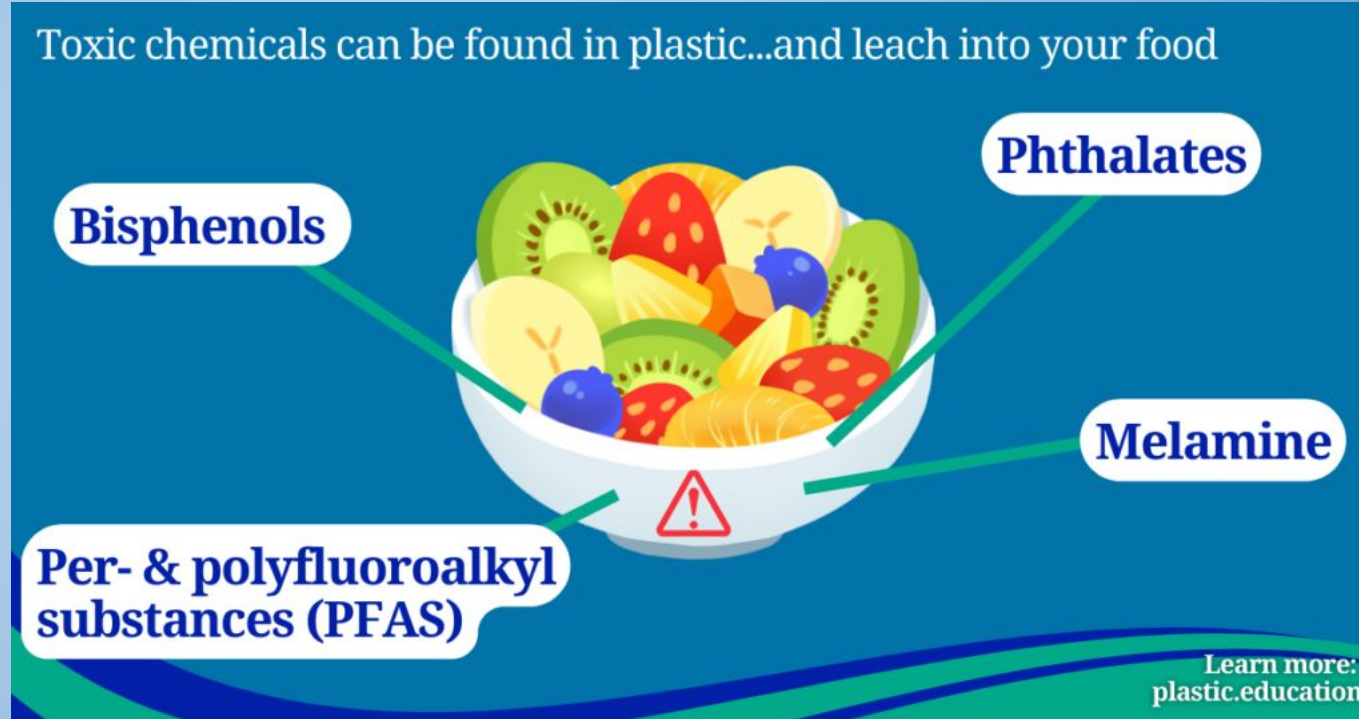


At least
63 CHEMICALS
used in **PLASTIC** food packaging
are toxic to health.



There are up to 10,000 chemicals used in plastic, including..

- Mercury
- Lead
- Polymer
- Antimony
- Bisphenols
- Phthalates



Plastic chemicals can cause...

Cancer

Kidney Problems

Birth Defects

Inflammation

Metabolism Disruptors

Gut Issues

Neurotoxicity

Kills Healthy Cells



Plastic producers add more than 10,000 synthetic chemicals to plastic polymers.

Leaching

Plasticizers and other chemicals leach out of plastic containers and packaging, especially when exposed to heat or fatty foods, into the food stored within them.



Hot Food and Plastic

When the plastic sits in a hot container it absorbs all the plastic particles, including toxins and chemicals. When plastics are heated, they release chemicals, including BPA and phthalates, into our cafeteria food.



Heat lamps
heating
plastic.

Interview with Custodian

- Custodians takes out 4-30 gallon trash cans twice a day.
- In the trash cans 75% of trash is plastic and 25% is food.

Observations of Single-Use Plastic in the Cafeteria

- Fruit, vegetables, and salads are packaged in plastic containers.
- Sandwiches come wrapped in plastic.
- $\frac{3}{4}$ of our waste is plastic



Cost of Plastic in our District





Money used for single-use plastic per day, month, and year.

- Plastic forks= 3 cents
- Plastic spoons= 3 cents
- Plastic bowls= 12 cents
- Paper boats= 8 cents
- Plastic sandwich wrap= 1 cent
- All of these = 27 cents per student per day
- 384 students a day =
- \$103.68 per day
- \$518.40 per week
- **\$18,662.40 per year**

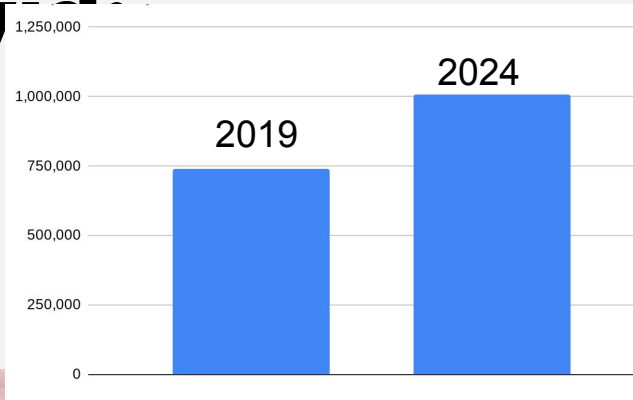


Initial cost of reusable dishware

- Stainless fork= \$0.16
- Stainless spoon= \$0.10
- Ceramic bowls= \$1.63
- Ceramic plates= \$2.97
- Reusable trays= \$0.29
- Total per student= \$5.15
- 384 students total= \$1,977.60
- **\$1,977.60**

Dishwasher cost per year (variable) ~ \$2,772.48

The Budget Now Compared to Before Covid



Total Food Services Budgets

- (reusable supplies)
2019: \$740,464
- (single use
supplies) 2024:
\$1,007,412
- Single-use plastic
has increased the
budget by \$266,948
since 2019.

Solutions

**Current Expenditures
per year**

\$18,662.40

**Possible Future
Expenditures per year**

\$2,772.48

+ hiring costs

Sustainability Efforts at SPE

2010-2011

- \$3,900 grant from the Colorado Department of Public Health and Environment
- Purchased reusable plates for SPE, SCE, & SSMS
- If we receive the same or a similar grant, that would fully cover the initial cost of reusable supplies.

Current Funding Opportunities



coloradocircularcommunities.org

- funding from fees from waste being dropped off at landfills
- Public schools can apply!

- For most awards up to \$250,000: [State PO Terms and Conditions](#)
- For most awards greater than \$250,000: [C3 Contract Template](#)

Mini Grants

Available Year-Round

- Awards up to \$50,000.
- Contract term of no more than six months.
- Eligible expenses include but are not limited to: equipment and supplies, signage, outreach/education, event space fees, event marketing/promotion, repairs, and contractual labor expenses.

**We did it in the
past, we can
do it again!**

- **We can have the responsibility to make sure reusable utensils go into a soapy bucket instead of the trash.**
- **Pre-Covid we had reusable materials and had a lower food service budget.**

Solutions:

Switch out plastic for ceramic plates, bowls, trays and stainless steel cutlery.

This will help:

- Reduce waste in the environment
- Eliminate toxic chemicals from our cafeteria into our bodies
- Cut costs



Works Cited

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2. CafeteriaCulture.org. "School Cafeteria Cost-Savings from Plastic-Reducing Food Service Adaptations." PDF. Google Drive, 2022. <https://drive.google.com/file/d/1MR82ZcvEUoVsr8nsPJG0cTA1fy1ukgxT/view?usp=sharing>.
3. *"Plastic is a Hazardous Substance: How Plastics Make Us Sick and Fat, and What You Can Do About It!"* Cafeteria Culture, www.cafeteriaculture.org/plastic-hazardous.html
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5. Weinstein, Jack. "Sustainability efforts in full swing at Steamboat schools: Good habits becoming 2nd nature at Steamboat schools." STEAMBOAT Pilot & Today, March 27th 2011.