

Problem

Matt: Scientists are studying the amount of plastic in the ocean and its effects. They're learning more every day.

Dom: Single use plastic production has increased and represents about 10% of all discarded waste, like water bottles, plastic bags and packaging.

Mac: Let's visualize the pollution: The amount of plastic entering our oceans can be compared to a large garbage truck of plastic dumped into the ocean every minute of every day.

Sam: By 2050, plastic production will triple, which means there will be as much plastic in the ocean and fish by weight!

Matt: Plastic lasts hundreds to thousands of years and even longer in the deep sea.

Dom: The wind and wave action break the plastic down into very small pieces called microplastics, which are distributed by ocean currents all around the world because all water is connected.

Mac: Birds and fish can choke on the plastics and consume it too.

Sam: Birds and fish are dying because the plastic fills their stomachs, they feel full and then don't eat and essentially starve to death.

Matt: The microplastics can absorb toxins which can expel into the fish. Predators like other fish and mammals eat the fish and scientists are unsure of the long term effects of the toxins on living organisms and how they will ultimately affect food chains and the food web.

Existing Solutions

Dom: Scientists are meeting worldwide and have decided that the most important solution is education.

Mac: People just have to reduce their plastic use, refuse single use plastic, reuse the plastic that they do buy and recycle their plastic. Here's what some creative people are doing:

Sam: The Seabin is a floating device that collects debris in the ocean. It uses a small submersible water pump and a mesh bag to collect up to 1.5 kg per day.

Matt: Costa Rica plans to ban all single use plastic by 2021.

Dom: The Slimbox is a machine that reduces waste by allowing companies to manufacture boxes that are just the right size for shipping. These boxes are also made of recycled paper and cardboard.

Mac: Fruit tattoos. That's right, you heard me correctly! Marks and Spencers is using a laser to tattoo the information onto fruit that would normally be on a sticker containing glue made from chemicals.

Sam: Public education programs used to encourage the 3 Rs.

Our Solution

Matt: Our solution is to create public service announcements for HRM that encourage our community to reduce, refuse, reuse and recycle plastics.

Dom: Our PSAs will include HRM celebrities that connect with Haligonians.

Mac: They will also use psychology, like normative influence, to try to change people's behaviours to follow the 4Rs in order to be liked and accepted in our community.

Sam: We've also created t-shirts to inform people about single use plastic pollution and get them thinking about what they can do to make a difference.

Matt: We would also like to see plastic pollution ocean warnings on single use plastic items like plastic water bottles and bags.

Dom: Here are the PSAs that we created.

PSA #1 (Sidney Crosby)

Sid: Can I get a double, double? Here's my reusable cup.

Consumer #1: Man, I didn't even know that you can bring your own reusable cups to Tims. I always use the disposable cups with the plastic lids.

Sid: Do people **even** use those cups still? About 200 billion disposable cups are used every year and many end up polluting our oceans.

Consumer #2: I haven't used those cups in years!

PSA #2 (Classified)

Kid: Hey, that's Classified!

Mom: Yeah, and he's using reusable grocery bags.

Classified: Plastic bags, that ain't classy! Every minute, 1 million plastic bags are used and they're contributing to ocean pollution. On the East Coast, we love our oceans.

PSA #3 (Ricky & Bubbles)

Ricky: I need another pop. (Ricky throws cup on ground.)

Bubbles: Ricky, you can't litter. The plastic ends up in the ocean and the little fishies eat it. And we don't know how it's gonna affect the food chain. You need to reduce the plastic you use, refuse plastic straws and lids, reuse the plastic you have and recycle it when it's not good.

Ricky: Yeah, it's not rocket appliances. Do you have another one of them shirts?

(Bubbles tosses Ricky a shirt and he puts in on.)

Final Thoughts

Ricky: For the gooder of us all...

Sid: **Reduce** your plastic pollution...

Bubbles: **Refuse** single use plastics...

Classified: Only buy plastic that can be **reused** many times...

Ricky: **Recycle** your plastic. And remember, what comes around is all around.