

BE THE SOLUTION, NOT THE POLLUTION

The saying goes, “Let he who shouts the loudest be heard first”, makes sense right? You scream at the top of your lungs and you are guaranteed to be heard...but are you being listened too? For decades society has heard environmentalists and scientists across the globe shouting out their concerns, but the world refuses to listen. The population is too busy tangled in a web of “my generation did this, and yours did that” failing to attack the problem before them getting progressively worse.

WAVING GOODBYE TO CLEAN WATER

Since the beginning of the industrial revolution, the world’s water quality has consistently gone down. Between ocean acidification and pollution, it will soon be time to say goodbye to the clean water the world once knew. Humans dominate the Earth and continuously disrupt the natural chains of ecosystems. The world’s water has already gone down 0.1 pH units, which means the increase in acidity is twenty-five percent in the past two centuries where before that, no drastic change in pH had ever occurred. This lower, more acidic pH is causing a disturbance to the water’s natural reactions that can lead to a decline in the calcium carbonate minerals that are crucial to certain marine life’s building of shells, bones and exoskeletons. Even still, our water is predicted to go down another 0.14 to 0.35 units in the next hundred years. Not only are we directly targeting specific species, but we are slowly turning the water into carbonic acid through a set of reactions that take place between the water and our highly polluted air.

A PAIN IN THE BUTT

Cigarettes are becoming one of the biggest pollutants around the world. A 2018 *Global News* article by Katie Dangerfield stated, “The filters of cigarettes are made of tiny plastic particles that take decades or more to decompose...out of the 5.6 trillion cigarettes that are made with these filters each year, almost two-thirds are dumped irresponsibly. Many of the filters contain harsh chemicals like nicotine, arsenic and heavy metals.” Evaluating upon this information, that is around 3.73 trillion cigarettes being improperly disposed of. If even half of them were exposed to run-off or direct bodies of water and ended up in the water system, that is a whole 1.86 trillion cigarette filters releasing their toxins into the water. Another article by *Vaping Daily* concludes that, “The chemicals from a single cigarette butt releases enough toxins to kill fifty percent of the fish exposed to it for ninety-six hours.” Now, times that 1.86 trillion cigarettes by the number of fish that could pass through the cigarette exposed area during those four days and imagine the numbers of marine life deaths from cigarettes alone.

PUTTING IT TOGETHER

According to *Natural Resources Canada*, right now in Canada carbon dioxide is the leading greenhouse gas emission being released from plastic processing industries. Carbon dioxide in the atmosphere reacts with hydrogen dioxide (water) to create carbonic acid. So, every plastic bag being used, every plastic fruit container being purchased, every wrapper, straw, gum package or any other single use plastic being used and thrown away is essentially contributing to the release of carbon dioxide. Thus, every time one uses the plastic single use bags at the grocery store, they

are responsible for putting a small portion of greenhouse gas emissions into the atmosphere that leads to ocean acidification. Not only that, but every time one drops a cigarette on the ground they are putting toxins into the water that hold the capability of killing half the fish exposed to that area during the four days.

WHAT IS THE SOLUTION?

Going back to the initial concept of “whoever yells the loudest is heard first” the solution seems quite easy, scientists and environmentalists need a louder voice. Yet here is the issue, the rest of the world will not listen. The various generations have created a war trying to place blame on the other for ‘starting this problem’ and majority of people have not begun a journey towards saving the environment. So what is the solution to our plastic pollution? It reminds me of this. My younger brother and I are only three years apart which means we loved to mess with each other as kids. Many times, the teasing or pranking escalated into yelling, pushing and fighting. I can distinctly remember fighting with my brother on numerous occasions, perhaps even starting the fight many times and most often it would result in my dad entering the room. He would look both of us dead in the eye and ask what happened, so every single time my brother and I would desperately try to pin the full blame on whatever it was that the other did wrong. No matter the true story, my dad’s response would always be “I don’t care who started it, I’m finishing it.” I tell this story to get a message across, it no longer matters what generation did what and who caused what issues. This fight is too big for one generation alone. I do not care who started it, all of us need to come together to ‘finish it’. How are we going to do this? By getting the message across. Everyone needs to tell everyone because I have news for you, whether it is last generation’s fault or next generation’s problem, this is OUR world. We have put too many ecosystems, organisms and lives on the line to back down now. This battle is not going to be easy, but it will be rewarding. So let’s start now. Gather friends, organize a cleanup, make reusable shopping bags, plant trees or simply just spread the word that this ends now. Let’s all come together and be the solution not the pollution!



From just a simple visit to the store, the average Canadian racks up tons of single use plastics that negatively impact the environment and increase pollution
Photo taken by Bella Todd

