The wind into the ocean. synthetic fibers from

Economics, Trade

The world is drowning is in plastic. Humans produce so much plastic waste that we barely know what to do with it. You can probably look around you right now and name ten things that have plastic in them. A lot of this plastic ends up in landfills where it will sit for thousands upon thousands of years until it finally breaks down, likely long after humans are gone.

But much of this plastic also ends up in our water supply. Oceans and freshwater lakes alike have both been plagued by an ungodly amount of microplastic particles in the past ten years. Humans are now using more plastic than ever, and it’s starting to show up in a major way. The implications of this increase in plastic consumption and waste could be very dangerous for us as we move into the future. Let’s go a little bit more in-depth on our plastic waste, and how it degenerates into a harmful substance known as “ microplastic.” Where Does All Our Plastic Go? With around 7 billion humans populating the Earth right now, we produce a lot of plastic. Plastic is used in everything from cigarette butts to water bottles, food packaging, and every kind of product you can think of.

While most of this ends up in landfills, a lot of it is able to enter our oceans. Tourists littering at the beach, people littering on the street, even people littering in urban cities are all contributing to the rising amount of microplastic in our oceans. When trash is washed into a storm drain or sewer like the ones found in cities, it often ends up deposited in the ocean. Of course, the litter found at beaches is washed directly into it by the tide, and even plastic inside landfills can be blown away by the wind into the ocean. Synthetic fibers from artificial fabric also find their way into the sea by way of our washing machines.

It’s all contributing to a steadily rising amount of microplastic worldwide. How Much Plastic is In the Ocean? Potentially up to 51 trillion particles of microplastic. Or about 19 billion pounds of garbage. Because of our inefficiency in preventing this stuff from entering the ocean, those numbers are expected to potentially double by the year 2025. There’s already a great plastic garbage patch in the Pacific Ocean which is about the size of Texas. As you would expect, this pollution is having a serious effect on all the wildlife found in our oceans many creatures can’t tell the difference between microplastic and their regular source of food.

Hence, they eat the plastic, which then ends up in the bellies of fish that eat them. In this way, microplastic works its way up the food chain until it finds its way back in the bellies of the creatures who deposited it in the ocean in the first place, humans. The problem is that when this plastic debris breaks down via wave action into microplastic, it tends to take on an odor similar to that of algae. This leads marine life to consume it, which can result in some pretty nasty effects. At best the plastic collects over time in the body of whatever animal eats it but produces no serious side-effects. At worst, it can mess with hormone levels or even cause cancer.

One study found that a certain breed of fish was actually suffering from the feminization of its male population due to the consumption of toxic microplastic. Many microplastics aren’t inherently toxic but tend to collect poisonous chemicals from other debris floating around. How Can We Clean This Up? Cleaning up the plastic in our oceans could be one of the biggest challenges we face right now.

We currently produce so much plastic that we would have to impose far stricter penalties for littering than we have right now. We would also need to ban any products which feature things like microbeads, and stop washing synthetic fibers in our washing machines. We currently have people hard at work on the project of cleaning the existing microplastics out of our ocean, and they are making some pretty big strides. Some estimate that we could even take out half of that great garbage patch within 5 years once these technologies are fully deployed. Of course, that doesn't stop a new one from being created in its place.

If we want to solve the plastic crisis we'll have to drastically reduce our consumption of everything plastic. That means rejecting plastic bags and plastic straws in favor of your own accessories. Using a metal straw in place of 500 plastic ones is one example.

It also means doing your best to avoid any food that's packaged in plastic. Recycling is an absolute must if you want to mitigate your own personal impact on this microplastic epidemic. Trade in your electronics rather than throwing them away and try to get the most use you can out of plastic items before you discard them. It Won't Be Easy, but We Can Do ItIf we want to end the threat of plastic eventually ending up in everything we eat and ruining the entire ocean, we'll need to take a stand against it. Refuse to use plastic items whenever you can, and pick up litter as soon as you see it. Assuming we can get the majority of humans to attack this problem from all fronts, we should be able to head off our microplastic crisis before it can do any permanent damage.

With a little bit of awareness and discipline, we can get our oceans back to the pristine conditions we found them in.