

"Currents" November 2022

What are Microplastics?

If you've watched the news over the past few years, then you have likely heard about something called microplastics being in our waterways. Microplastics are pieces of plastic smaller than 5 mm in diameter – about the size of a plastic straw or pencil eraser. They are created by larger plastic objects being broken down over time or they can enter waterways as "nurdles". Nurdles are small plastic pellets that are melted down to be used in the production of everyday plastic items. If stored or transported improperly, they can easily spill and be introduced into the environment as pollution.

Microplastics can be consumed by living organisms such as birds, fish, oysters, and invertebrates which often leads to obstructions in the digestive system, impaired reproduction, malnourishment, and occasionally death. Smaller prey fish and birds are highly susceptible as the small pieces of plastic look like a potential meal, but instead they make the creature feel full while providing no sustenance. It is currently unclear what the long-term effects of microplastics will be on humans and the environment; there has recently been a significant increase in research on the topic and the body of knowledge will continue to grow in the future.

Microplastics occur less often in the Guadalupe River compared to the ocean, but they are found in nearly all bodies of water on Earth. This kind of pollution makes the river a worse habitat for our healthy and diverse population of aquatic organisms. We rely on the river as a source of drinking water and value its aesthetic and recreational importance. All of these benefits are threatened by the loss of our aquatic organisms.

Luckily, there are ways everyone can help reduce microplastic pollution in our waterways. The most effective way is to prevent larger plastic products like disposable containers and grocery bags from entering the water. You can do this by decreasing your reliance on single use plastic products and ensuring that when you are out enjoying the beautiful Guadalupe River, you properly recycle or dispose of all trash. If you are visiting the river near Ingram Dam, look for the red dispenser holding waterway cleanup bags. Take one, fill it up, and throw it in the trash!

If the health of the Guadalupe River is important to you, take a step further to do your part by picking up trash in and along the river. As some of you may know, UGRA organizes an Annual River Clean Up in July that has been made possible every year by our wonderful sponsors and volunteers. Last year over 7,000 pounds of litter was collected and much of that trash was plastic. During 2023, we will host our 20th Annual River Clean Up! If you are interested in this initiative to keep trash and microplastics out of our river, please be on the lookout for announcements coming soon about the event or visit our website at http://www.ugra.org/major-initiatives/river-clean-up.

Let's Keep Our River Clean