PART 2 - WHERE ARE MICROPLASTICS IN THE ENVIRONMENT?

Microplastic pollution is abundant in the environment; the chemical composition of plastic includes carbon-to-carbon bonds that are extremely difficult to break, and nearly impossible for bacteria to biodegrade in nature. As discussed in our first microplastic article all plastics can and will become microplastics during the process of degradation. In this article, we will discuss the common environmental fates of microplastics, but you can assume that anywhere a plastic is, a microplastic will soon be found there too.

A plastic cup left on the beach, ski resort, or park will breakdown into microplastic, and enter the ecosystem, it can then be introduced into the air via wind, or into a watershed via rain or snowmelt.

- Microplastics are found in freshwater ecosystems including creeks, rivers, ponds, and lakes.
- Microplastic can be found in all the earth’s oceans and seas.
- Microplastics have been found in the polar ice caps.
- Microplastics have been found in remote mountain environments where known sources of plastic are at least 60 miles away. These microplastics have undergone atmospheric transport.

Microplastics that are in water can undergo a process called biofouling, in which microscopic organisms bond to the plastic material; think of a pier piling covered in barnacles. These combined substances can then be confused as food for plankton, or fish and are ingested. Aquatic microplastics can be found throughout the water column and also get buried in sediment at the bottom.

Microplastics are also found in terrestrial ecosystems, including our homes. Synthetic materials, such as fleece, shed microplastic fibers that can be found in indoor dust particles. Synthetic fibers also release microplastics when they go through the clothes washers. The grey water from washing machines is processed at the local treatment facility. These microplastics get separated out with the biosolids, which are later applied onto farmland as fertilizer. Even smaller particles remain in the wastewater effluent and are discharged with the effluent water into rivers, lakes and oceans.

Studies are currently underway here at Lake Tahoe to understand the amount of microplastic pollution that is present on our beaches, and future studies will look lakeward.
SEWER PUMP STATION 1 UPGRADES

We have restored some of the original functionality of the pump station that was lost in the 1980s or earlier. This has involved major cleaning operations at 3:00 AM to remove grit that accumulated at the bottom of the open tanks and hauling away thousands of gallons of grease.

- Gates have been repaired
- New mixers installed
- Odor control upgraded
- Check valves replaced
- Isolation valves replaced
- Emergency exercises performed

All this is part of why we conduct exercises, not so we just get it right, so that we can’t do it wrong when the real emergency hits.

WATER EFFICIENT APPLIANCE REBATE

The first 100 applications for high efficiency appliances are eligible for one rebate per parcel, up to $100 credit towards their IVGID utility bill. High-efficiency appliances eligible for the rebate include WaterSense toilets using 1.28 gallons of water per flush, or Energy Star washing machines that have a water factor of 3.7 or less.

Applicants must fill out and submit to IVGID Waste Not:
1. The High-Efficiency Appliance application
2. A copy of the original receipt (dated on/after July 1, 2019 and before June 30, 2020)
3. A photo of the installed appliance with model number.

The rebate application is available on our website: https://www.yourtahoeplace.com/public-works/water/water-conservation

Questions? Call IVGID Waste Not at (775) 832-1284 or email: wastenot@ivgid.org

REMEMBER TO TURN OFF YOUR WATER EVERY TIME YOU LEAVE!

Visit the winterization information on our website: www.yourtahoeplace.com/public-works/water/winterization