The Tangled Web of
Flushed Wipes

By Shawn Dobson, ORWA Wastewater Technician

How do we persuade our customers not to use their toilets as trash cans? Most folks know not to toss trash in their own toilet, yet a surprising number of Americans "accidentally and on purpose" send anything and everything down the commode. Plastic, clothing, rags, and all sorts of wipes. The use of wipes has increased exponentially due in part to heavy marketing toward women, children, and men. According to a recent study by the American Water Works Association, wipe use is not only skyrocketing in 2020, it is causing collection-system blockages and WWTP headaches. As ORWA's Wastewater Tech John Heil notes, "Wipes are constipation for any collection system, and they are usually part of pump clogs."

Restrictions of flow and blockages can be reduced by making our customers aware of the many consequences of sending tampons, condoms, and the dreaded "flushable wipes" down the drain. Often the wipes and other debris weave together — even after lift-station grinder pumps — resulting in reduced flow and wasted pump energy. Just the normal maintenance of dealing with fibrous materials is costly. ORWA recommends explaining the fact to customers through billing inserts, online platforms, and social media. Tell them exactly how sending trash down their toilet leads to wasted electricity and increased maintenance costs. ORWA can help member systems explain the impact to homeowners and other community members. Your customers think wipes, tampons and condoms are

biodegradable and thus safe to send down a toilet; so, part of a utility's mission must be to make their community understand that wipes and debris fail to break down in a sewer system.

Condoms are primarily made from latex but can also be made from natural materials or plastics. Latex breaks down relatively well in a landfill, but water within the infrastructure of the sewer system does not allow latex to dry out and degrade as it normally would within the landfill. A condom flushed into plumbing and eventually into the wastewater system can get caught in a narrowing of a pipe or possibly in a piping fitting. If a condom happens to become trapped, it can make a perfect seal within a pipe while catching any other solid trying to make its way through the collection system.

Tampons are next on the list to wreak havoc inside wastewater piping. Tampons are fibrous and primarily made of cotton fiber. Tampons are indeed biodegradable, but this product takes a significant amount of time to disintegrate as it moves throughout a plumbing or wastewater system. The fibers and string can entangle with other debris and easily clump together to snag on rough piping interiors or joints. These obstructions slow down pumps, wasting precious energy. Tampons also often combine with wipes during the process of clearing a pipe with a motorized sewer snake or a high-pressure jet.

Wipes of many types are a great nuisance when flushed. Like tampons and other hygiene products, wipes are magnets for the multitude of solids passing through a sewer system. Wipe fibers snag at various locations in collection systems, and clog headworks screens. Your customers need to know how tampons, wipes, socks, rags, and cloth scraps wind around the cabling of sewer snake and can weave together in lift stations, increasing labor and maintenance costs.

We'd all like to see wipe manufacturers stop specifically marketing their products as "flushable." Until we get this transparency from the wipe makers, we must combat this false sense of security for our unsuspecting customers. The facts are on our side. Numerous studies have proven that wipes marketed as flushable do not break down like conventional toilet paper. Our customers can benefit from learning a little about the municipal wastewater systems that support their way of life. They can gain some better understanding regarding the true costs involved beyond their plumbing. By educating our customers regarding the true cost of using their toilet as a trash can, we are empowering our communities while saving wastewater operations considerable time and money. ■