



TOWN OF WAREHAM

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Why is Sewer Important?

Community wastewater management and adequate sewer systems play important roles in sanitation and disease prevention. Wastewater with fecal waste (or poop) can contaminate the local environment and drinking water supply, thereby increasing the risk of disease transmission. To improve health, it is vital to develop a system to manage community wastewater and sewage. (CDC).

Many countries face challenges in providing [adequate sanitation](#) for their entire populations, leaving people at risk for diseases related to water, sanitation, and hygiene (WASH). Worldwide, an estimated 1.7 billion people lack basic sanitation (about 21% of the world's population). Basic sanitation is defined as having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial and hazardous waste management, and wastewater treatment and disposal. Around 2.3 billion people (about 29% of the world population) lack access to basic hygiene, which includes access to a handwashing station with soap and water at home.

The United Nations' Millennium Development Goal (MDG) sanitation target to halve the proportion of people without sustainable access to basic sanitation by 2015 was not achieved. Today, the United Nations' Sustainable Development Goal (SDG) aims for everyone to have "adequate and equitable" sanitation and basic hygiene by 2030. (CDC)



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Untreated sewage poses a major risk to human health since it contains waterborne pathogens that can cause serious human illness. Untreated sewage also destroys aquatic ecosystems, threatening human livelihoods, when the associated biological oxygen demand and nutrient loading deplete oxygen in the water to levels too low to sustain life. Sewage can be intentionally discharged to waterways through pipes or open defecation, or unintentionally during rainfall events.

When humans use these waterways for drinking, bathing or washing, they are exposed to the associated pathogens, many of which can live for extended periods of time in aquatic environments. Humans then become ill by ingesting contaminated water, by getting it on/in skin, eyes or ears, or even from preparing foods with contaminated water. Sometimes humans can even become ill from inhaling contaminated water droplets. Life-threatening human pathogens carried by sewage include cholera, typhoid and dysentery. Other diseases resulting from sewage contamination of water include schistosomiasis, hepatitis A, intestinal nematode infections, and numerous others. WHO estimates that 1.5 million preventable deaths per year result from unsafe water, inadequate sanitation or hygiene. These deaths are mostly young children. Another 860,000 children less than five years old are estimated to die annually as a direct or indirect result of the underweight or malnutrition associated with repeated diarrheal or intestinal nematode infections (Worst Polluted).

The findings of a [study](#) published in *Environmental Research Letters* have serious implications for the health of city dwellers in developing countries. The study used geographic information systems-based modelling methods to develop the first spatially-explicit estimate of the global extent of irrigated croplands influenced by urban wastewater flows, including both direct and indirect wastewater use. It



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found that the area affected by untreated wastewater is around 30 million hectares, a 50 per cent increase on the previous estimate.

It also found that 65 per cent of downstream irrigated croplands were within 40 km of an urban area, with high levels of dependence on wastewater flows. Most of these croplands were in around 70 countries with low levels of wastewater treatment, exposing 885 million urban consumers as well as farmers and food vendors to serious health risks. Five countries – China, India, Pakistan, Mexico and Iran – account for most of this cropland. (UNEP). “Wastewater discharge heavily impacts both people and our water bodies. We estimate that severe pathogenic pollution – primarily from a lack of sanitation treatment – can be found in up to a third of rivers in developing countries, leading to direct health effects.” Wastewater will be in focus at this year’s World Water Week – an annual gathering focusing on the globe’s water issues. The theme for the 28 August – 2 September event in Stockholm is “Water and Waste – Reduce and reuse”. The week aims to provide an opportunity for practitioners, policy makers and the public to brainstorm practical solutions to the world’s water challenges. (UNEP).

Then we’ll look at **6 Tips On How to Maintain a Sewer Line**, that flow into and affect the mainline sewer environment:

1. Limit Food Down the Kitchen Drain Line
2. Properly Dispose of Non-Food Items
3. Flush the Plumbing System
4. Set Toilets to High Volume Flush
5. Tend to Your Roots
6. Naturally Clean Your Plumbing System (Spies).

Your sewer line needs to run efficiently and [drain cleaning](#) is the best way to keep it going normally. Whether your sewer lines are clogged by



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grease, roots, soap buildup, feminine hygiene products, or more, you need to get it fixed quickly, your home is important to you!

What **NOT** to Flush Down the Toilet To help you save embarrassment, thousands of dollars in expensive plumbing repairs, and avoid polluting the environment, pay attention to this list of things that you must **never, EVER,** flush down the toilet:

1. Feminine Products: Tampons and other feminine hygiene products are not supposed to be flushed down the toilet.
2. Cooking Grease/Food: Grease should never be poured down any drain, period. It may look like a liquid that can easily be dumped down a drain, but when it cools, it will congeal and clog up your pipes. Collect your grease in a glass jar and throw it in the trash, or save the grease and reuse it, especially bacon grease
3. Baby Wipes/Wet Wipes/Cleaning Pads: These “adult baby wipes” are becoming increasingly popular nowadays. They are also increasingly causing clogs and backups in sewage pipes across the country. Although some of these brands might say they are flushable on the box, there are groups that are revising the guidelines, so soon all wet wipes will have a noticeable DO NOT FLUSH symbol on the packaging. If you must use these, throw them away in the trash can. Keep one close to the toilet. Flushing wet wipes can easily turn into an expensive mistake when you have to call a plumber to snake your toilet.
4. Dental Floss: Floss is not biodegradable and can cause serious clogs and environmental damage.
5. Q-tips/Cotton Balls: You might think that cotton will break down, since some toilet paper is made from cotton linen, but they don't! They will clump together, causing stoppages at bends in the pipes.
6. Diapers: Just because there is human waste inside does not mean that they are OK to flush. Diapers are made to expand in water. In



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the unlikely case you actually get the diaper to flush, it will likely get caught in the U-bend of the pipe.

7. Pills: You may think it is a good idea to put pills out of harm's way, but you are probably doing more harm than good by flushing them. They have toxic effects on groundwater supplies and wildlife. There are many community-based "take back you meds" programs.
8. Paper Towels/Tissues: If you really want to save money and help the environment, you will use washable cloths and rags, but if you have to use paper towels, throw them in the trash, not the toilet. Tissues and paper towels are not made to dissolve like toilet paper; throw them in the trash.
9. Cigarette Butts: What a waste of water! Each flush uses up to three gallons. They look gross floating in the water and they are full of toxic chemicals that end up going straight into the groundwater supply. If you have to smoke, throw the butts away properly.

What does that leave? Not much! Human excrement and regular toilet paper (**NO Bamboo Toilet Paper**) are the only things you should flush down your toilet. (MA.Gov). There is also a "Non-Flushable" List on the Town of Wareham Website under "Sewer Documents". The document includes an extensive list of items that should **NEVER** be flushed down the toilet.

Keeping our sewer systems clean is extremely important for the current population as well as the future population and our environment. The detrimental effects of untreated sewage seeping into our drinking water, recreational water, and more, will destroy not only the environment, but also our bodies. If you have any questions please do not hesitate to ask. Remember, just because a product says flushable doesn't mean it **SHOULD** be flushed.



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