

# Your Drains Are Not a Dump

Presented by the Fond du Lac Wastewater Treatment and Resource Recovery Facility

# FOG



## FATS, OIL & GREASE

# EFFECTS OF FOG

- Greasy foods cause blockage in the sewer lines in the same the same way fat cause blockage in the arteries.
- Over time, pipes can decrease in diameter with the build up of FOG.
- The result is a thick pipe coating that can decrease the pipe diameter, and flow significantly.
- Once FOG starts to build up, it can accumulate more FOG, leading more quickly to full blockage.
- Sink drains and sewer back ups are inevitable.
- Health risks become a concern when backups and overflows occur.
- FOG, if not cleaned properly, is a vector for bacteria build up and disease.



**FOG** come from food and cooking processes.

- ❖ Meat Fats
- ❖ Lard
- ❖ Cooking Oil
- ❖ Shortening
- ❖ Condiments
- ❖ Dressings
- ❖ Butter and Margarine
- ❖ Food Scraps
- ❖ Baking Goods
- ❖ Dairy Products
- ❖ Sauces
- ❖ Gravies



# DID YOU KNOW?

- ◆ Waste produced by all the different stages of food preparation, cooking and clean up are potential sources of **FOG**.
- ◆ Home garbage disposals do not keep grease out of the plumbing system. Moreover, hot water and products such as detergents that claim to dissolve grease only pass it down the line and cause problems elsewhere.
- ◆ Fats are solid at room temperature, oils are liquid at room temperature and grease is a mixture.
- ◆ All types of **FOG** are viscous and can stick to sewer pipes causing blockages and backups.

# THE PROBLEM

Sanitary sewer systems are neither designed nor equipped to handle the **FOG** that accumulates on the interior of the sewer collection system pipes.

The best way to manage **FOG** is to keep the material out of the plumbing systems.





# WHY SHOULD FOG MATTER TO YOU?

When washed down a sink or drain, FOG builds up over time and can cause a blockage in your drains, pipes and in sanitary sewers.



Household Plumbing



Sewer Lateral

# IT'S YOUR MONEY

Blockages lead to increased costs to maintain your private plumbing, obstructions in your sewer lateral, our sewers, the wastewater treatment plant and public and private property.





# GREASE TRAPS

Traps or interceptors should be installed to protect sewers from areas that produce FOG: food prep sinks, dishwashing sinks, pot washing sinks, mop sinks and mat washing areas.

Traps allow wastewater flow to be detained long enough for FOG to separate out and float to the top for ease of removal.

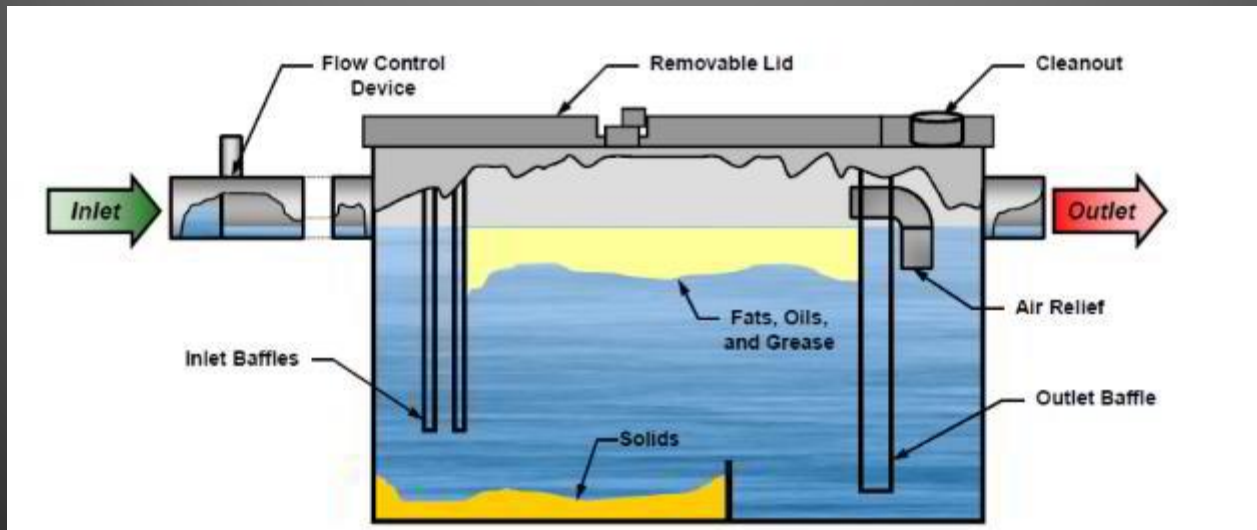
Traps need to be cleaned on a routine basis.



# GREASE INTERCEPTORS

Interceptors are pretreatment devices generally over 750 gallons located outside the facility.

Interceptors should never receive solids. Routine, often daily, maintenance is needed to ensure that they reduce or prevent blockages.



# BEST MANAGEMENT PRACTICES

The most economical way to deal with FOG in food preparation, cooking and cleaning!

## B M P's

- Never hot flush (continuously run hot water) through a grease trap.
- Keeping the trap as clean as possible will prevent it from becoming a task no one will want to perform.
- Scrape leftovers into a food waste container prior to washing.
- Contract with a rendering service for recycling used cooking oil, meat, and/or trap grease.

# HOW CAN YOU HELP?

- ❖ Pour cooking fat or grease into a small container. Once it cools or solidifies, place it in the garbage.
- ❖ Dispose of greasy solid waste in the trash.
- ❖ "Dry wipe" pots, pans and other dishes before washing to minimize the amount of **FOG** and solids washed down the drain.
- ❖ Don't dispose of **FOG** into food waste disposers, sinks, toilets, or floor drains.
- ❖ Do not put used cooking oil, oil-based paints, motor oil, solvents or other chemicals down sewer lines or storm drains. Large quantities of home cooking oil from fryers should be poured back into the original oil containers.

**FOG** ISN'T THE ONLY THING  
THAT SHOULDN'T BE  
FLUSHED DOWN THE DRAIN



# WIPES

## TO FLUSH OR NOT TO FLUSH?

- They're advertised and marketed as “flushable” but that doesn't mean they breakdown or “biodegrade” like toilet paper does.



This is a sample of the debris that comes into our plant on a daily basis.

In 2017, we removed 159 tons of this waste. None of this material should have been flushed down a toilet or drain.



This Debris Consists of Mainly Non-Biodegradable Materials Such As:

- Feminine Hygiene Products
- Personal & Baby Wipes
- Paper & Rags
- Cleaning Wipes

All of these items can cause damage to our equipment which result in increased maintenance and repair costs.

Domestic waste pipes are typically just 4 inches wide and even bathroom products that claim to be flushable should be thrown in the garbage instead.





Disposable wipes can cause major problems when flushed down toilets. Because they don't break down the way toilet paper does, these wipes clog homeowner and municipal sewer pipes, put stress on the wastewater collection and treatment equipment, and cause us to spend thousands on premature equipment repair and replacement.



# CONVENIENCE & COMFORT THEY'RE GOING TO COST YOU

Continuing to flush your wipes down the toilet will eventually lead to a clog, and this is not an “if”, or maybe, but a **when**, because this is something that is very likely to happen.

The problem isn't just the wet wipes because, the wet wipes are simply a part of the clog. Grease, hair, toothpaste, and even food that goes down the drain will all come together into one big clog. The larger the clog is, the harder it is to remove, and the more costly it's going to be for you to get rid of.

Many will first experience a problem with their toilet if they continue flushing wipes down the drain. The toilet may overflow at one point, or it's possible that it can't flush anything but keeps backing up into the toilet or slow draining.

Those that have a large clog caused by the wipes may also see that when they go to take a shower, the drainage in the shower is simply hoarding water as opposed to draining it.

There's also a possibility that when you're using the sink, the sink will not drain as well, and this all can be caused by a large clog within the drainage system in your home.



They also get drawn into sewer-line and wastewater treatment plant pumps and clog and damage them. Municipalities must manually clear out pumps or remove clogs.



Wipes snag on any imperfection in sewer pipes, catch passing debris and grease, and create a “ball” that will grow to plug the pipe.



“Flushable” wipes, combined with diapers, condoms, tampons and congealed fat, can stick together to form a gargantuan 'fatberg', like the one that clogged London sewers in 2017.

At 143.3 tons and covering 820 feet, it's the biggest ever unearthed in Britain. That's as heavy as at least 20 African elephants, and as long as 2.5 football fields.

It was rock solid and took an eight person crew working seven days a week more than three weeks to remove it.



The London “Fatberg”

# QUICK FACTS AND STATISTICS

- The wipes market has been growing at 6% to 7% percent annually for much of the past decade.
- The problem costs U.S. utilities up to \$1 billion annually, according to the National Association of Clean Water Agencies.
- **90%** of flushed materials were not intended for wastewater treatment systems.
- Only **7%** of wipes are designed to be flushable.
- Wastewater systems suffer when blockages occur. It's been proven that particular difficulties arise when woven fabrics build-up within them such as disposable wipes – even if they are labeled as flushable.





Please Only Flush the Three P's:

Pee, Poo and Paper



# BE AN ADVOCATE

- You can help educate others about **FOG** and Wipes by sharing this information with friends and neighbors.
- The Fond du Lac Wastewater Treatment and Resource Recovery Facility is working hard to improve water quality by informing residents and businesses of ways to reduce water pollution, sewer backups and improve the quality of life for those who live and work here.
- For more information on wipes, or managing fats, oils and grease call 920-322-3663.

