### Best Management Practices

Never pour oil or grease down sink drains or into toilets.



- ► Collect grease in a container and dispose of it in the garbage. Oil can be mixed with an absorbent material like kitty litter before it is disposed of in the garbage.
- Scrape grease and food scraps from pots, pans, plates and cooking utensils into the garbage before washing.
- ▶ Do not use extremely hot water and detergents to dissolve the grease, it only moves the problem down the line. Look for phosphatefree soaps.
- Limit use of the garbage disposal to dispose of food wastes.



#### **Results of Sewer Backups:**

- **\$** Raw sewage backing up into your home or your neighbor's home
- **\$** Potential contact with disease-causing organisms
- **\$** Expensive and unpleasant cleanup that often must be paid for by the homeowner
- **\$** Increased operation and maintenance costs for the Sewer Department which could lead to higher sewer bills for the customer



### City of Wenatchee

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# Fats, Oils and Grease (FOG)



Inside of a sewer line with soap bubbles floating on the wastewater and FOG hanging from the ceiling of the pipe. The diameter of the sewer pipe is reduced by the FOG, creating a potential site for a blockage.



### Where does the grease come from?

Grease is the common term for animal fats and vegetable oils. It is naturally occurring in many foods. It is used in many recipes and is used as a medium for frying food. Grease is a normal byproduct of cooking.

Common household sources of FOG are:

- Meats
- Lard, Shortening
- Cooking oil
- Butter and margarine
- Milk, Cream, Ice Cream
- Cheese, Yogurt
- Baked goods
- Sauces
- Food scraps



"Greasey" The Grease Goblin says ...

"Keep Drains Fat-Free"!

Used with permission from North Carolina Department of Environment and Natural Resources

## Fats, Oils, and Greases aren't just bad for your arteries and your waistline; they are bad for the sewers, too.

FOG is not just a problem in the City of Wenatchee's sewer system. FOG can cause blockages anywhere in the sewer system from lines inside the house to the sewer main lines. Some blockages can be removed, others are so solid that the section of pipe must be replaced. The results of a blocked line are always unpleasant and expensive for the homeowner.

Just like in our arteries, the problem with FOG in the sewer is that it restricts the lines until it forms a solid plug. FOG is 8—12 % lighter than water and it does not mix with water. This causes it to float on top of the wastewater in the sewer lines. The FOG may be in liquid form if it is washed down the drain with hot water, but as the water cools the FOG changes to a solid form. This solid FOG is lumpy and sticky. It has a natural tendency to stick to anything that it comes in contact with, which usually means the sewer lines. Once a sewer line has a restriction due to FOG it can very easily become completely blocked by collecting FOG or by sewage-born solids sticking to it.

The best way to deal with the FOG problem is to keep our sewer fat-free. Fats, Oils and Grease should never be poured down the drain, it should be collected and disposed of in the garbage. Pots, pans, plates and cooking utensils should be scraped or dry-wiped before they are washed.

To address this problem the City of Wenatchee is working with both private residence and commercial business owners alike. Commercial FOG contributors have either a grease-trap or a grease-interceptor installed to allow the FOG and solids to settle out before their kitchen waste is discharged to the sewer system. In addition the City has a preventative maintenance program of regular cleaning of the sewer mains.

Looking down in a sewer manhole—On the left a solid layer of FOG buildup. On the right is the manhole after it has been cleaned. Now the channels that the sewage flows in are visible.



