

What is stormwater runoff?

Stormwater runoff occurs when rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

WHY IS STORMWATER POLLUTION A PROBLEM?

Stormwater can pick up debris, chemicals, dirt, and other pollutants, and drain into the storm sewer system, which discharges into lakes, streams, rivers, wetlands and other waterbodies that we use for swimming, fishing and drinking supply.



THE EFFECTS OF POLLUTION

Polluted stormwater runoff can have many adverse effects on creeks, rivers, lakes and water supply sources, as well as plants, animals and people.



- Household hazardous wastes like insecticides, pesticides, paint, solvents, auto fluids, and other chemicals can poison the aquatic life and pollute the drinking water supply.
- Sediment from unfinished or disturbed yards can help transport pollutants into waterways. Naturally occurring phosphorous found in soils is a nutrient contaminant. Sediment can also destroy aquatic habitats by clouding the water, making it difficult or impossible for aquatic plants to grow.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Debris - plastic bags, six pack rings, bottles, and cigarette butts - that is washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles and birds.

STORMWATER POLLUTION SOLUTIONS

Many routine activities conducted at your home can have significant negative impacts on our creeks, rivers, lakes and water supply. Through simple measures at home, you can help protect our natural resources.

LAWN CARE

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.



- Don't overwater your lawn. Use waterwise gardening techniques. Perform regular irrigation system checks.
- Use pesticides and fertilizers sparingly, and only in recommended amounts. Use organic mulch or safer pest controls whenever possible. Sweep up excessive fertilizer from sidewalks and streets.
- Compost or mulch yard waste.
- Cover piles of dirt or mulch being used in landscape projects.
- Sweep leaves, grass, and other debris into the trash, and avoid washing these materials into the street or storm drain.

SEPTIC SYSTEMS

Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be carried by stormwater into nearby waterbodies. Pathogens can contaminate the drinking water sources and adversely impact the environment.

- Inspect and pump the system every 3 to 5 years, or sooner if necessary.
- Do not dispose of household hazardous waste in sinks or toilets.

HOUSEHOLD HAZARDOUS WASTE

If disposed of improperly, many common household products can be hazardous to our environment as well as people and their pets.



- Always use and store the product according to the instructions.
- Keep chemicals in the original container or properly labeled.
- Take old or excessive product to your local Household Hazardous Waste Collection Center. Visit the city's website for more information.
- Latex paint can be disposed of in the regular garbage after it has been completely dried.
- Buy only what you intend to use. If you have some leftover, check and see if anyone you know can use it before bringing it to the Household Hazardous Waste Collection Center.
- Never dump household hazardous waste into creeks or streets!

AUTO CARE

Washing your car and degreasing auto parts at home can send detergents, oils, and other automotive fluids through the storm drainage system. Dumping automotive fluids such as oils, gasoline, and coolants into storm drains or on the ground has the same effect as dumping them directly into streams, rivers and lakes.



- Use commercial car washes that treat or recycle their wastewater, or wash your car in your yard where the water can infiltrate soak into the ground.
- Have routine maintenance performed on your automobile to prevent leaks. When leaks are found, have them repaired immediately. Properly clean up fluids that have leaked.
- Properly dispose of automotive fluids. Utilize Household Hazardous Waste Collection Center for fluid disposal.
- Utilize commercial oil change companies and auto parts stores who will accept your used motor oil.

PET WASTE

Pet waste can be major source of bacteria and excess nutrients in local waters.



- When walking your pet, properly pick up and dispose of waste. Leaving pet waste on the ground increases health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local watersheds.



A growing sanitary habit is to use wipes instead of normal toilet paper. It is not a problem until they are disposed of in the toilet. Many wipe packages sold in stores are labeled as "flushable", however, they are NOT. Wipes will flush down the toilet, but will not disintegrate like toilet paper. Instead, they will stay completely intact until they are removed manually.

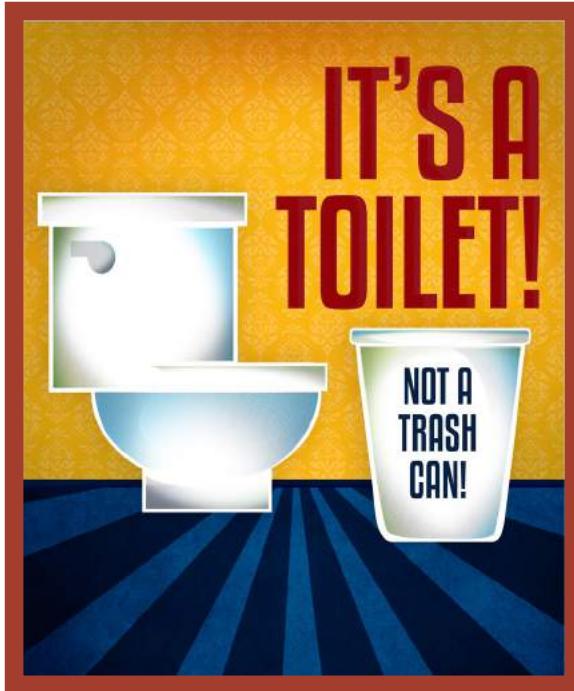


City of Haltom City/Public Works
4200 Hollis Street
Haltom City, TX 76111
817-834-9036



NON- FLUSHABLE ITEMS

**What goes down
might not go away...**



It's Not Just Wipes!

Many other household objects can cause major problems in sanitary sewer or wastewater treatment plant, including:

- Tissues
- Floss
- Cotton Swabs
- Feminine Products
- Diapers
- Bandages
- Kitty litter
- Paper towels

Unlike toilet paper, these products do not break down and will clog pipes and machinery causing unpleasant sewer backups and overflows.

How Non-Flushable Items Cause Problems

Once an item is flushed, it reaches a pump or a lift station within minutes. Anything besides toilet paper can get trapped in a screen or inside the equipment. Screens are designed to catch larger debris, but once the screen is full - the water will not pass through causing the sewer to backup or overflow. Backups and overflows may occur anywhere, including residential properties. They pose a significant threat of pollution to our environment, living species, and drinking water sources. Additionally, obstructions in sewer pipes, pumps, and machinery require expansive repairs and/or replacement of equipment.



How Can You Help?

- Save yourself and your wastewater utility from pain in the drain - dispose of these items in the trash, not in the toilet!
- Teach your children to do the right thing.

REMEMBER: Nothing can go down the drain except toilet paper!





Properly dispose of yard waste.

- Remove yard waste from streets, sidewalks, and driveways.
- Blow or sweep grass clippings or tree leaves into the yard where they can help provide additional nutrients to the lawn.
- Don't Bag It™! Use grass clippings or leaves as mulch to fertilize the lawn and protect landscape plants from extreme weather. Mulching mowers make this easy.
- If you have a compost bin, add extra yard waste to that bin.

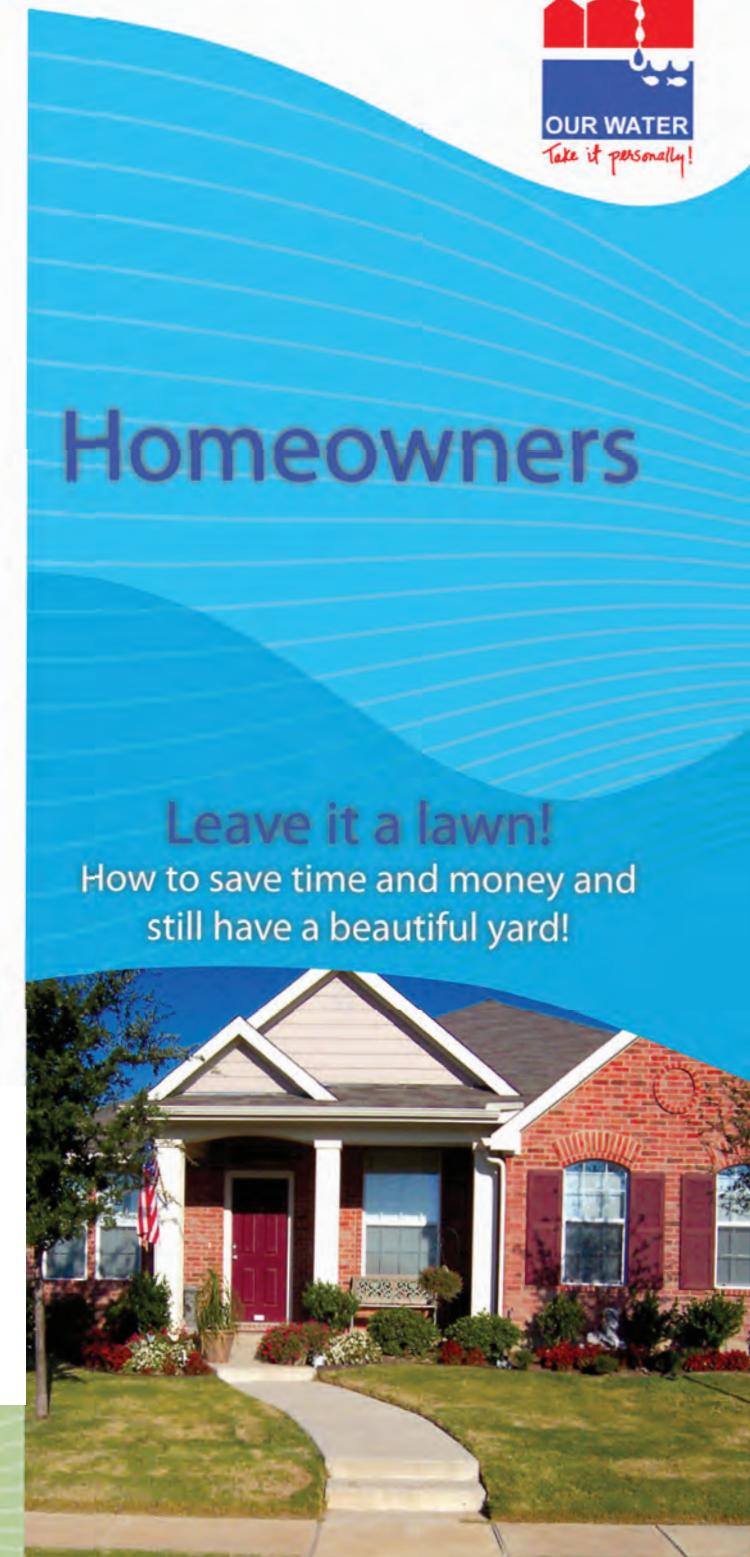
Help keep yard waste where it belongs—on the lawn!



Produced by:

The North Central Texas Council of Governments
in cooperation with
Regional Storm Water Management
Program participants.

For more information visit
www.dfwstormwater.com/yardwaste



Homeowners

Leave it a lawn!

How to save time and money and
still have a beautiful yard!

Homeowners, like you, are becoming aware of the impact improper disposal of grass clippings, fallen tree leaves, and other yard waste has on the landscape, wallet, and local lakes, rivers, streams, and creeks.

If you want to do less yard work, save money, be environmentally-friendly, and still have a beautiful yard, **keep yard waste out of the street, sidewalk, driveway, and storm drain**. Here's why:

Improve your landscape with less work!

Leave it a lawn! **Don't rake and bag fallen tree leaves or bag grass clippings.**

Instead, to keep these nutrients where they can nourish the lawn, mulch grass clippings and leaves and **leave them on the lawn**, or compost them. This will provide a natural fertilizer for the lawn to save you time and energy!

Did you know?

Grass clippings left on the lawn will provide up to 25% of the lawn's total fertilizer needs.

Leaves contain 50 to 80% of the nutrients a plant extracts from the soil and air during the season.

Save money!

Bagging grass clippings, tree leaves, and other yard waste and placing them into the curbside garbage collection system:

- **uses valuable landfill space and**
- **costs residents** more in taxes and service fees.

Fact: During the year, at least 20% of the solid waste generated by Texans comes from grass clippings, tree leaves, and other yard waste.

If grass clippings and/or leaves are swept or blown into a nearby storm drain, the **storm drain may become clogged and cause flooding.**

The city must then clean the storm drain, which uses up tax dollars.

Avoid a ticket!

In many cities blowing or sweeping yard waste into the storm drain is **illegal**, and you could **receive a ticket** for this violation!

Be environmentally-friendly!

Yard waste blown or swept in the street, sidewalk, driveway, or storm drain can **end up in nearby creeks, streams, rivers, and lakes** during a storm or when watering the lawn.



- Yard waste in a local waterway can **kill fish** and other aquatic life because it uses oxygen from the water.
- Improperly applied fertilizers can **wash down the storm drain** and harm aquatic life.

By using your yard waste as a natural fertilizer, you can help **reduce storm water pollution.**

What is storm water runoff?

Storm water is water from rain. It flows from rooftops, through lawns, over paved streets, sidewalks and parking lots, across bare soil, and into storm drains to our streams, creeks, and rivers. As it flows, runoff collects and transports pet waste, soil, pesticides, fertilizers, oil and grease, litter, and other pollutants. These materials carried with the storm water are called non-point source pollution, and are some of the largest sources of pollution to our water.

Did you know?

There are an estimated 60 million dogs in the United States? That's 16.4 billion pounds of poop per year!

What does that mean?

When it rains, the potential exists for thousands of pounds of waste to wash down the storm drains and into our streams, rivers, and lakes – untreated! That means harmful bacteria associated with all this dog waste is going to our water.



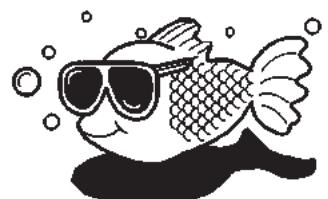
For more information, contact:

**City of Haltom City
Environmental Services
Public Works Department**

4200 Hollis Street
Haltom City, TX 76111

817-834-9036

www.haltomcitytx.com



Pet Waste & Water Quality

Pet Waste is a health hazard and a water pollutant

Are you polluting our waterways?

When pet waste is left on the ground or disposed of improperly, water quality and your health may be at risk. Storm water runoff can pick up pet waste as it washes down the storm drains, drainage ditches, and into our rivers, lakes, and streams. Pet waste that is not picked up **can pollute our water.**

Bacteria, parasites, and viruses contained in pet waste are a health hazard. Pets, children who play outside, and adults who garden are at risk of infection from these pathogens.

Consider some of these:

- **Fecal Coliform.**

Found in the feces of warm blooded animals, this indicator bacteria is a potential health risk for individuals exposed to it in the water. A single gram of pet waste contains an average of 23 million fecal coliform bacteria.

- **Salmonellosis.**

The most common bacterial infection transmitted to humans and other animals.

- **Toxocariasis.**

Roundworms usually transmitted from dogs to humans.

- **Toxoplasmosis.**

A parasite carried by cats that can be a problem for people with depressed immune systems.



Other problems...

Pet waste not only risks the health of other animals and people, it can cause serious water quality problems.

Pet waste is high in nutrients, which

feed the weeds and algae that can choke out our creeks and lakes. The water becomes cloudy and green – unattractive for swimming, boating, and fishing. Excessive nutrients are a major cause of water quality decline.

When pet waste is washed into

lakes and streams the waste decays, using up oxygen and sometimes releasing ammonia. Low oxygen levels and ammonia combined with warm temperatures can kill fish and other aquatic life.

I want to be a responsible Pet Owner, but does this mean I have to pick up after my pet?

Yes, you do have to “scoop the poop” but it’s a small price to pay to protect our water quality.

Whether in your yard or walking your dog, you can easily do the right thing. Purchase a “pooper scooper” or simply use a shovel and/or plastic bag.

What you can do...

- Pick up pet waste from your yard. It is not fertilizer.

- Carry disposable bags while walking your dog to pick up and dispose of waste in the trash.

- Flush your pet's waste down the toilet to be treated.

- Bury pet waste in the yard, at least 6 inches deep and cover with soil. It will decompose slowly. Bury the waste in several different locations in the yard and keep it away from vegetable gardens.

Let's Tackle the Grease in This Kitchen!

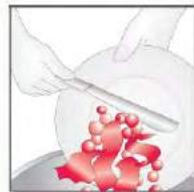
Why should I help?

- Prevent grease buildups from blocking sewer lines.
- Stop sewer overflows into streets and storm drains.
- Save money spent on costly cleanups of sewage spills.
- Reduce the number of times you have to clean your grease trap (food service).
- Protect the quality of our water.



DO!

- ✓ Put oil and grease in covered collection containers.



- ✓ Scrape food scraps from dishes into trash cans and garbage bags and dispose of properly. Avoid using your garbage disposal.



- ✓ Remove oil and grease from dishes, pans, fryers, and griddles. Cool first before you skim, scrape, or wipe off excess grease.



- ✓ Prewash dishes and pans with cold water before putting them in the dishwasher.



- ✓ Cover kitchen sink with catch basket and empty into garbage can as needed.



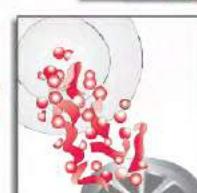
- ✓ Cover floor drain with fine screen and empty into garbage can as needed.

DON'T!

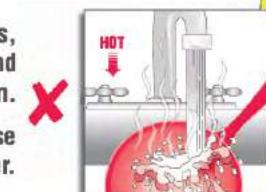
- ✗ Don't pour oil and grease down the drain.



- ✗ Don't put food scraps down the drain.



- ✗ Don't run water over dishes, pans, fryers, and griddles to wash oil and grease down the drain.



- ✗ Don't rinse off oil and grease with hot water.

More Ways to Tackle Grease

- ▶ Use environmentally safe cleaning products instead of harsh detergents or cleaners that can damage sewer lines.
- ▶ If you generate large amounts of used cooking oil, reuse or recycle it. To find a recycler, check the phone book under "recyclers" or "rendering companies."
- ▶ If you generate small amounts of used cooking oil, reuse it as often as possible and then pour it into a container you can throw away. Never pour it down the drain.

