A Citizen's Guide to Understanding Stormwater

What is a storm drain for?

A storm drain is designed to drain excess rain and ground water from impervious surfaces such as paved streets, parking lots, footpaths, sidewalks, and roofs. Storm drains vary in design from small residential dry wells to large municipal systems. Most storm drainage systems are designed to drain the storm water, untreated, into rivers or streams. As a result, it is not okay to pour certain types of chemicals into the drains.

What is stormwater runoff?

Stromwater runoff occurs when rain percipitation flows over the ground. Impervious surfaces like driveways, sidewalsk, and streets prevent stormwater from naturally soaking into the ground.

Why is stormwater runoff a problem?

Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to area lakes and streams. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing and providing drinking water. *Polluted runoff is the nation's greatest threat to clean water.*

By practicing healthy household habits, residents can keep common pollultants like pesticides, pet waste, grass clippings, and automotive fluids off the ground and out of stormwater. Adopt healthy household habits and remember to share the habits with your neighbors!

Healthy Household Habits for Clean Water Solutions -

Auto Care – Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on a lawn or other unpaved surface so the sudsy water infiltrates into the ground.
- Check your car, boat, motorcycle, and other machinery for leaks and spills. Make repairs as soon as possible. Clean up spilled fluids with an absorbent material like kitty litter or sand, and don't rinse the spills into a nearby storm drain. Remember to properly dispose of the absorbent material.
- Dispose of used auto fluids and batteries at designated drop-off or recycling locations such as the Lake Travis Regional Reuse & Recycling Center.

Lawn and Garden – 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. If drains are clogged with leaves and grass, damage to homes could occur during a rain event.

- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible. Avoid application if the forecast calls for rain; otherwise, chemicals will be washed into your local watershed.
- Select native plants and grasses that are drought and pest resistant. Native plants require less water, fertilizer and pesticides.
- Compost, mulch or bag yard waste. Don't leave it in the street or sweep it into storm drains or streams. When grass and leaves are dumped into drains, they quickly clump and solidify which could lead to backup damage.
- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler. Water during the cool times of the day, following your Outdoor Watering Schedule, and don't let water run off into the storm drain.
- Cover piles of dirt and mulch being used in landscaping projects to prevent these pollutants from blowing or washing off your yard and into local watersheds. Vegetate bare spots in your yard to prevent soil erosion.

Home Repair and Improvement

- Before beginning an outdoor project, locate the nearest storm drains and protect them from debris and other materials.
- Use hazardous substances like paints, solvents, and cleaners in the smallest amounts possible, and follow the directions on the label. Clean up spills immediately, and dispose of the waste safely. Store substances properly to avoid leaks and spills.
- Purchase and use nontoxic, biodegradable, recycled, and recyclable products whenever possible.
- Clean paint brushes in a sink, not outdoors. Filter and reuse paint thinner when using oil-based paints. Properly dispose of excess paints through a household hazardous waste collection program, or donate unused paint to local organizations.
- Reduce the amount of paved area and increase the amount of vegetated area in your yard. Use native plants in your landscaping to reduce the need for watering during dry periods. Consider directing downspouts away from paved surfaces onto lawns and other measures to increase infiltration and reduce polluted runoff.
- Sweep up and properly dispose of construction debris such as concrete and mortar.

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

• When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local watersheds. **Swimming Pool and Spa** – Just as you treat your pool chemicals with caution; take caution when draining pools and spas.

- Drain your swimming pool only when a test kit does not detect chlorine levels.
- Whenever possible, drain your pool or spa into the sanitary sewer system.
- Properly store pool and spa chemicals to prevent leaks and spills, preferably in a dry covered area to avoid exposure to stormwater.

Septic System Use and Maintenance – Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- Have your system inspected by a professional at least every 3 years and pump your tank as necessary (every 3 to 5 years.)
- Care for the septic system drainfield by not driving or parking vehicles on it. Plant only grass over and near the drainfield to avoid damage from roots.
- Don't dispose of household hazardous waste in sinks or toilets.
- Flush responsibly. Flushing household chemicals like paint, pesticides, oil and antifreeze can destroy the biological treatment taking place in the system.

Storm drains connect to waterbodies!

Remember: Only rain down the drain!

For more information, visit www.wcid17.org or www.epa.gov/npdes/stormwater

> You may also contact: General Manager Travis County WCID 17 3812 Eck Lane Austin, TX 78734