CLEAN WATER FACT SHEET

CHARITY CAR WASH

CITY OF ABILENE—STORMWATER UTILITY DIVISION

Did you know that something as beneficial as a charity car wash can actually damage the environment? The City of Abilene's Stormwater Utility Division provides car wash fundraisers with this fact sheet to help protect Abilene's creeks and lakes. The mission of the Stormwater Utility Division is to prevent polluting discharges to the City's storm sewers and waterways.

The cumulative effect of flushing cleaning agents to creeks and lakes can be devastating to aquatic life.

Car washes have long been a favorite fund-raiser for scout troops, schools, and other non-profit groups. They provide a needed service, can be done with little capital investment, and are very visible. Only in the last few years have we all become more aware of the environmental impact our car washes can have. Dirty water containing soaps, detergents, residue from exhaust fumes, gasoline, and motor oils are washed off of these cars and flow directly to the nearest storm drain.

All by itself, your car wash may not seem to be contributing that much. But collectively, each of these car washes, done on a regular basis as they are in many communities, contributes some very serious pollution. By following the common sense practices provided later in this fact sheet you can make a difference in the water quality and health of Abilene.

The Problem:

Lack of Planning.
Your charity car wash could be ruined if you don't plan ahead. Chances are, the wash water will end up in a storm drain and eventually a nearby creek or lake, resulting in environmental damage and potential fines.

Flushing cleaning agents into storm drains or waterways.
Washing vehicles near storm drain inlets or waterways can easily result in cleaning agents and dirty water entering our creeks and lakes. This will pollute our waterways and is therefore illegal. Cleaning agents are designed to emulsify or bind pollutants, such as oil, grease, and dirt. So, flushing chemical cleaning agents to the environment can have a devastating impact. Oil and grease destroys aquatic organisms. Even biodegradable soaps and detergents (especially phosphate detergents) contain nutrients. When washed into our creeks and lakes, the nutrients cause a rapid growth, or "bloom", of algae and aquatic weeds. As these plants die and decay, oxygen in the water is used up, creating foul odors and taste in drinking water. In addition, a bloom can kill fish and other aquatic life, along with clogging pipes and water intakes. Excessive vegetation is also dangerous to swimmers and boaters and requires costly mechanical removal.

Flushing cleaning agents through stormwater traps.
Many commercial lots have stormwater traps designed to minimally treat stormwater running off the site. Flushing hot water or cleaning agents such as

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soaps and detergents to an oil/grit separator (or stormwater trap) is especially harmful because it emulsifies the oil and grease. The oil and grease then pass through the separator with wash water or rain water to the storm sewer, polluting the receiving waterways. Flushing wash water containing toxic or hazardous chemicals to oil/grit separators contaminates these structures, requiring costly cleaning.

Washing vehicles where grease, oil, sediment or trash has accumulated.
Parking lots and driveways often accumulate motor oil, fuel, and antifreeze from leaking vehicles, trash, and plain old dirt and debris from Mother Nature. Your wash water can flush these pollutants into storm drains and the environment. This is illegal and can result in stiff penalties. Trash and debris can clog storm drains or waterways, leading to increased maintenance costs and potential flooding problems. Trash also creates an aesthetic nuisance and decreases the recreational value of a creek or lake. Leaves and grass clippings add unneeded organic materials to our waterways; as they decay, oxygen needed by fish and other aquatic life is depleted. Anti-freeze, fuels and oil are toxic to humans, animals and aquatic life. For example, toxic metals such as arsenic, chromium, lead, copper, and mercury are found in used automotive fluids. Sediment and dirt turn waterways cloudy, making them less suitable to plant growth, fish life, and recreation. Sediment also smothers bottom-dwelling aquatic life, clogs fish gills, and blocks sunlight necessary for underwater plants. Many other pollutants, including metals, oil and grease, bacteria, and some nutrients attach to soil, and are then carried by the soil particles to our waterways - increasing the pollutant load in our waterways.

The Solution:

Choose a proper wash site and car washing method
1.*Wash cars at a commercial car wash which treats its wash water*. Some commercial car washes and gas stations with on-site car wash facilities send their wash water to a recycle system or the sanitary sewer (to the wastewater treatment plant). Here the wash water is properly treated prior to being used again or being released to the environment. Contact a local facility that has on-site car wash facilities to see if they would be willing to allow for your charity event to occur at their location.

2. Use only plain, cold water to wash cars. Why use cleaning agents if you don't need them? If a vehicle is simply dusty, cleaning agents may not be needed. Rinsing with water may do the trick. Besides, a little extra effort can clean a dirty vehicle. Once you rinse the car, wipe it with a clean cloth to prevent streaking or spotting. Wash the windows, interior, and tires with cleaners, then wipe them off, instead of rinsing wash water into the storm drain or onto the parking lot. Many fund raising groups have successfully washed cars this way!

3. Use a biodegradable detergent and discharge wash water to a grassy area or storm-water filtration pond. No cleaning agents (even biodegradable ones) can be legally flushed into a storm drain or waterway. The key to using a biodegradable soap or detergent is ensuring the wash water enters a large enough vegetated area (or stormwater filtration pond) where cleaning agent has time to break down. (**Note:** Any site where the wash water will drain to a vegetated area can only be used for temporary, one-time events.)

How do you determine if a cleaning agent is biodegradable?
Obtain a Material Safety Data Sheet (MSDS) from the manufacturer or distributor to determine if it is biodegradable and non-toxic. Generally speaking, most liquid dish detergents, which are free from dyes and perfumes, are considered biodegradable.

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2. *Use only plain, cold water to wash cars.*
3. *Use a biodegradable detergent and discharge wash water to a grassy area or a stormwater filtration pond.*

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Avoid wash water discharges to oil/grit separators.
Check the area where you plan to wash and make sure your wash water will not drain to a storm sewer or oil/grit separator. Many gas stations have oil/grit separators on their lot. If you are unsure, the Stormwater Utility Division, Water Department, or a licensed plumber can help you identify where your wash water drains.

Plan ahead by notifying the Stormwater Utility Division in advance.
Give yourself enough time before the event to decide on an appropriate site. Once you choose a wash site, notify the Stormwater Utility Division to approve your site, car wash method, and biodegradable cleaning agent if one is being used.

Obtain any other approvals necessary.
Don't forget to get approval from and confirm the date and time of your event with the business sponsoring the car wash. If you plan to use biodegradable detergent and let the wash water drain to a grassy area or stormwater pond, notify and get permission from the property owner onto whose land the water will be draining. If you don't know the property owner, ask the business operator to help you find out.

Pre-clean soiled paved areas.
Make sure the area to be used for your event is free of accumulated grease, oil, dirt, and trash *before* you start your car wash. Sweep and dispose of trash and debris first. Then, heavily stained areas can be spot-cleaned using a mixture of clay absorbent (e.g. kitty litter), water, and powdered soap. Once the mixture dries, it too can be swept up and disposed of in the trash.

Best Management Practices.
Follow these BMP's to control pollutant discharges. The objectives are: 1) to keep pollutants from contacting rain, and 2) to keep pollutants from being dumped or poured into the storm drains. The goal is "only rain in the storm drain."

- Find a sponsor for your carwash that uses a closed loop washing system - one that recycles its water. Do not hold your carwash at a facility that is not properly equipped. Popular host sites such as service stations and parking lots usually do not have the necessary connections to the sanitary sewer.
- Ask a local commercial carwash to donate a part of the days proceeds or see if they will allow you to market a special wash ticket.
- Hold your carwash at an industrial or commercial site that has a designated equipment/vehicle wash area. This wash pad must be directly connected to the sanitary sewer; the property owner is responsible for all necessary discharge permits.
- Rent a mobile washing system that can contain the water on the site and vacuum up any excess water. Although not inexpensive, collecting and rerouting the water is the only way to protect the storm drain system.
- Be creative with new fund-raising ideas. Ask neighbors to donate items for a flea market. Ask your Chamber of Commerce if any local merchants would pay to have flyers distributed. See if you can get sponsors to pledge money for a park or creek clean-up.

The Bottom Line:

It can be very costly to clean up discharges into storm drainage systems and oil/grit separators from improper disposal of vehicles washing wastewater. There are costs associated with environmental damage to storm drainage systems, waterways, and adjacent properties. It is also costly when fines or criminal penalties are given to persons contributing to an illegal discharge. It is the responsibility of both the group doing the washing and the business that sponsors them, to ensure that all applicable regulations are followed.

***Biodegradable** does not necessarily mean safe to the environment—these products often degrade faster, but are still toxic to aquatic life.*

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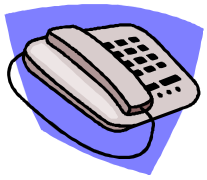

For More Information:

City of Abilene Stormwater Utility Division
555 Walnut Street
(325) 676-6281

City of Abilene Environmental Recycling Center
2209 Oak Street
(325) 672-2209

Hazardous Materials Handling and Storage
City of Abilene Fire Department
(325) 676-6434

National Pollutant Discharge Elimination System (NPDES) Permits
U.S. Environmental Protection Agency (EPA)
Region 6: (214) 665-7523
Federal: (202) 564-9545

Texas Pollutant Discharge Elimination System (TPDES) Permits
Texas Commission on Environmental Quality (TCEQ)
Local: (325) 698-9674
State: (512) 239-4671

Utility types and locations
One Call Location Center
(800) 545-6005 (call 2 working days before you dig)

Waste Disposal Information
City of Abilene Solid Waste and Recycling Division
(325) 676-6053

Emergency Numbers

Abilene Fire Department (emergency)	911
City of Abilene 24-hour Hotline	(325) 676-6000
TCEQ Emergency Response Center (24-hour)	(512) 463-7727 or (800) 832-8224