



# Car Care for Cleaner Water

A SERIES OF WATER QUALITY FACT SHEETS ABOUT STORMWATER RUNOFF

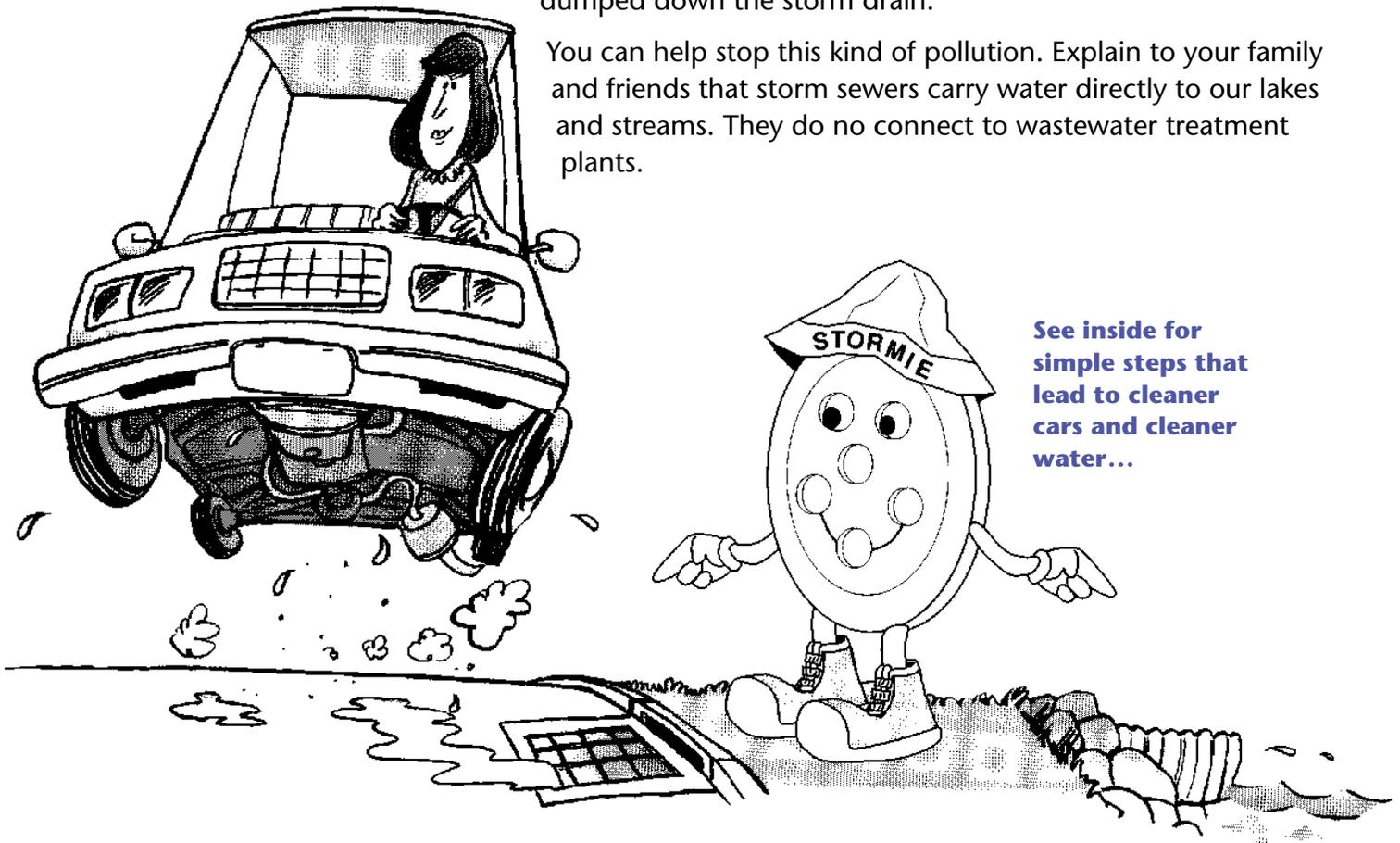
**W**e all know that cars cause air pollution. But did you know that cars also cause water pollution? As we drive, our cars and trucks leave bits of tires, brakes and rusty metal on the street. When we park, our cars and trucks leave stains of oil, grease, and transmission fluid on driveways and parking lots. Less visible are the tiny exhaust particles that gradually settle out of the air or come down with the rain or snow.

What happens to all this "car dirt" when it rains? Rain and melting snow wash auto pollutants off the pavement, down the gutter, and into storm drains. Under these drains are storm sewers – pipes that carry the dirty water to lakes, streams or wetlands.

Even on sunny days, polluted water often flows out of storm sewers. To understand why, take a walk to a small stream in your town. Do you see mounds of foam? Streaks of blue? An oily sheen?

The foam may come from soapy water that runs down the street when we wash cars in our driveways. The bright blue streaks are probably antifreeze drained from radiators. The oily sheen may come from used motor oil dumped down the storm drain.

You can help stop this kind of pollution. Explain to your family and friends that storm sewers carry water directly to our lakes and streams. They do not connect to wastewater treatment plants.



**See inside for simple steps that lead to cleaner cars and cleaner water...**

**1. Recycle Oil**

Old motor oil can be reprocessed and used again and again. Just put it in a container with a tight lid such as a plastic jug or metal can, and take it to a community oil recycling center. Don't pour anything else in with the oil because contaminated oil cannot be recycled.

Recycling is the only safe way to get rid of used motor oil. Never use old oil to kill weeds or to oil roads. Oil poured down the storm drain ends up in our lakes and streams. The five quarts from your car could create an oil slick the size of two football fields or pollute a million gallons of drinking water.

**2. Use Commercial Car Washes**

Taking your car to a commercial car wash or spray booth is a good way to protect our lakes and streams. The dirty water from the car wash goes to a wastewater treatment plant where pollutants are removed.

If you wash cars on a paved driveway or parking lot, the dirty water ends up in our lakes and streams. In addition, phosphates in the soap you use act like fertilizer. Weeds and algae decompose and use up oxygen needed by fish. If you want to wash your car at home, drive it onto the lawn or a gravel drive where the water will soak into the ground. The soil will filter out most pollutants.

Thinking of having a car wash to raise money for charity? Team up with a commercial car wash and sell car wash tickets for an environmentally-friendly fund raiser.

**3. Keep Your Car Tuned Up**

Cars that run smoothly burn less fuel and causes less pollution. A tuned-up car saves you money by using up to 20% less gasoline. Regular tune-ups also reduce the amount of hydrocarbons, nitrous oxides and other pollutants that come out of your car's exhaust pipe. These chemicals pollute our water as well as our air. Hydrocarbons can cause cancer and nitrous oxide is one of the ingredients in acid rain. Acid rain increases the toxicity of other pollutants in street runoff, which adds to the risk of sickness or death for fish and other aquatic life.

**4. Repair Leaks**

Spots on your driveway or garage floor mean the engine, transmission or radiator in your car is leaking. Have the leak repaired right away. Then clean up the spot by using cat litter or another absorbent material to soak up the spill. Sweep up the cat litter and put it in a sealed bag in the trash for disposal. Do not scrub the spot with detergent and wash the dirty water into the street. Remember, all that dirty water ends up in lakes and streams.

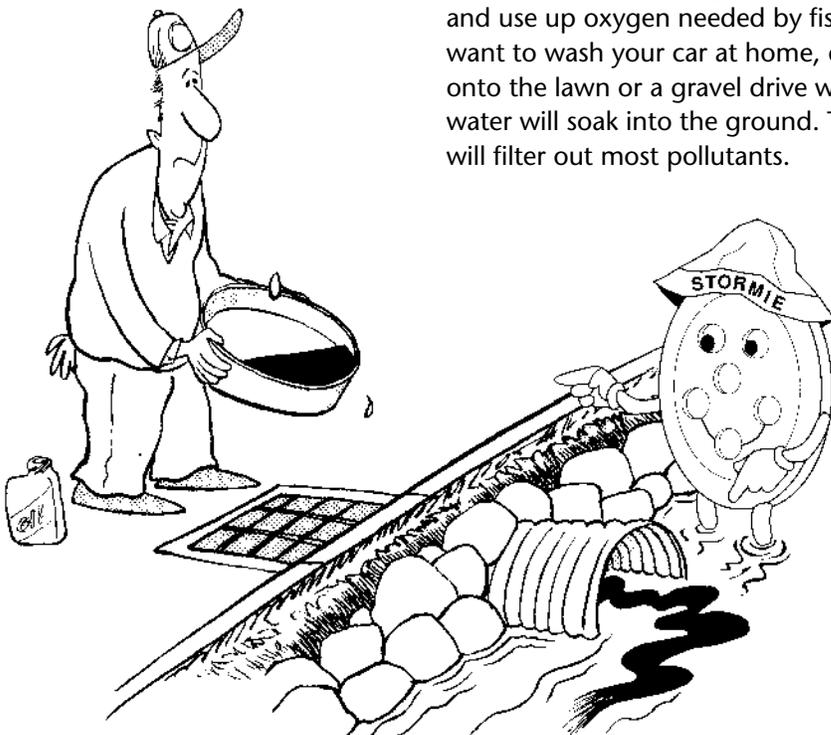
**5. Recycle Antifreeze**

Recycling antifreeze can be a challenge. A few recycling sites now have separate tanks for antifreeze collection. Check with your local gas station or auto repair shop – they may accept used antifreeze.

Used antifreeze should not be flushed down the drain because it has pollutants that may cause problems for sewage treatment plants or septic tanks.

Antifreeze is very poisonous to people and animals. Because of its sweet taste and smell, antifreeze may attract children or pets and other animals. Drinking only three ounces may kill an adult and even less will kill children or pets.

**Anything dumped into a storm drain flows directly to a nearby stream or lake.**



## 6. Return Used Batteries

Return your used car or truck battery to the place where you bought it. Other retailers may charge you for disposal. Be careful – old batteries may leak acid. Wear gloves and goggles and put the old battery in a leak-proof container. If you drop it, neutralize any spilled acid with baking soda or lime.

Do not throw old batteries in the trash or bury them – you'll be breaking the law. Old batteries contain hazardous chemicals that can leach through the soil and pollute our groundwater.

## 7. Check Tire Pressure

One of the simplest and cheapest ways to prevent pollution is to keep your tires inflated. For every pound that your tires are under-inflated, your car loses 1% in gas mileage. Under-inflated tires also wear out sooner. The solution is simple – check your tire pressure frequently, especially as temperature changes in the fall and spring. Tires lose a pound of pressure for every 10-degree drop in temperature. By reducing the amount of gasoline your car burns, properly inflated tires reduce the amount of polluted exhaust that your car makes.

## 8. Use Up Paints, Polishes and Cleaners

Paints, polishes and special cleaners for cars are usually flammable and toxic. Try to buy only what you need. If large amounts are left over, donate them to a friend or a school auto-repair class.

To dispose of small amounts, leave the container open in a safe place away from children, pets, wildlife and flames. When the liquid is gone and the substance is hard, cap the container and put it in the trash. The potentially toxic ingredients are locked into the hardened material and are less likely to cause pollution. However, burning will release the toxic chemicals. If your community burns trash, ask the public works department how to properly dispose of these materials.

## 9. Substitute Shoveling for Salt

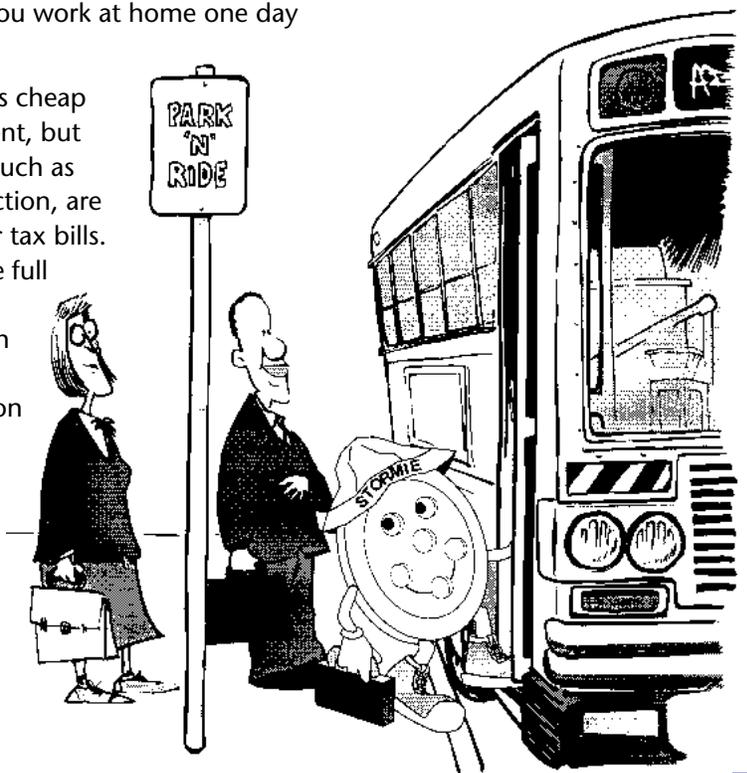
Salt may be an easy way to get rid of snow and ice, but it pollutes lakes, streams and groundwater. It also kills trees and grass as well as corroding auto bodies, metal bridges and underground cables. Shovel your driveway and sidewalk before the snow gets packed down and icy. If the pavement is still slick, use sand or sand mixed with salt to provide some traction and melt the snow. After the snow melts, sweep up the sand to keep it out of storm sewers and waterways.

## 10. Drive Less

Driving less is the best way to prevent pollution. Water quality tests show that the most polluted runoff comes from heavily traveled streets and highways. This runoff often contains enough zinc, lead or copper to kill fish and other aquatic life.

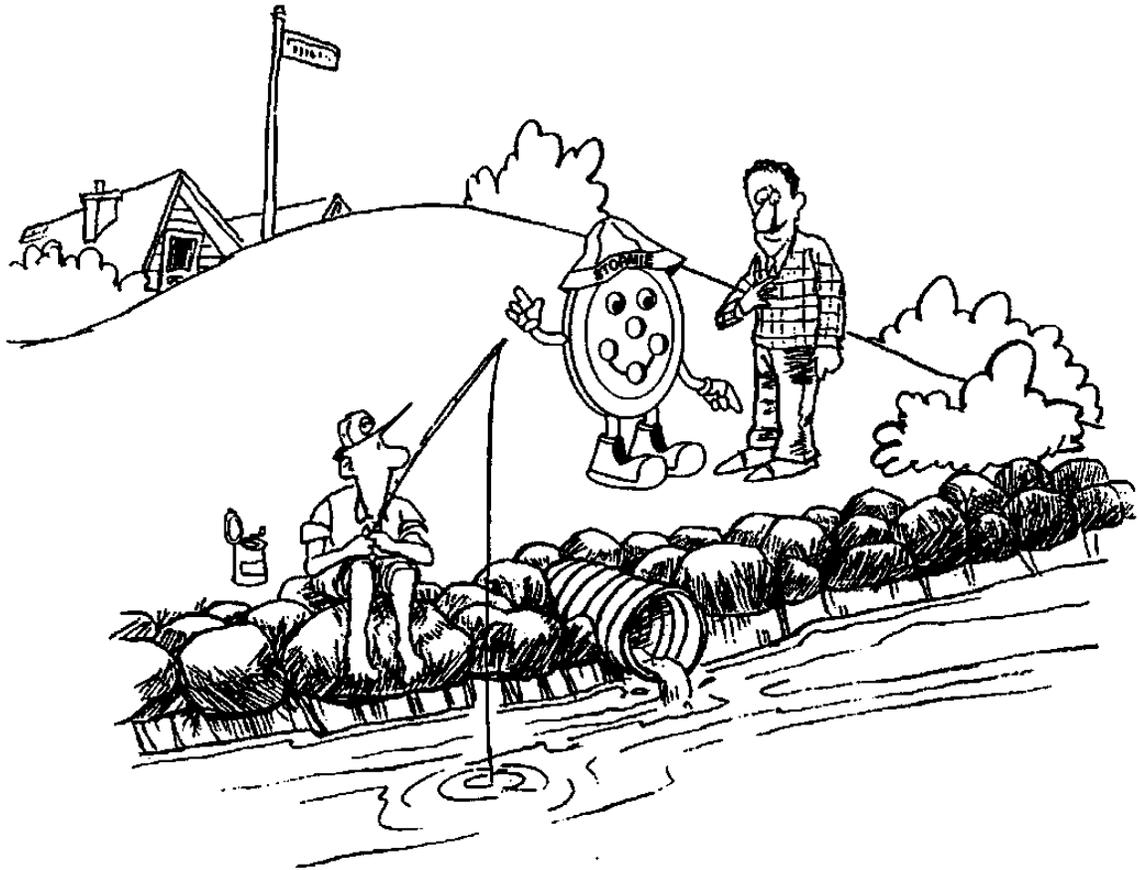
Is there a way you could help reduce water pollution by driving less? Could you walk, ride a bike, car pool or take the bus to work? If not every day, could you do this once or twice a week? Could you do several errands on your next shopping trip? Could you work at home one day a week?

Driving seems cheap and convenient, but many costs, such as road construction, are hidden in our tax bills. If we paid the full price of auto transportation at the gas pump, a gallon would cost \$4.50 or more.



## IT ALL ADDS UP

By following the simple steps listed inside, we can all help reduce the pollution that comes from our cars, streets, driveways and parking lots. Together, our actions will add up to cleaner water for us and our children.



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Author: Carolyn Johnson, UW-Extension.

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# IT'S TIME TO WORK ON THE CAR!



## DID YOU KNOW?

Each year in the United States, an estimated **180 million** gallons of used oil are disposed of improperly. That's sixteen times the amount spilled by the *Exxon Valdez*! Improper disposal of auto fluids includes dripping, spilling, or pouring them onto the ground, directly into waterways, or down storm drains.

## WHAT CAN YOU DO?

Proper use and disposal of auto fluids is an easy way to prevent stormwater pollution and protect our lakes and streams.

- ◆ **DO** drain fluid into a drain pan. Use a funnel to pour fluid into a plastic container.
- ◆ **DO** recycle used oil.
- ◆ **DO** recycle your old oil filter. Poke holes in it and let it drain into your oil pan for several hours first.
- ◆ **DO** dispose of radiator fluid properly. Don't flush your radiator where fluids may flow into a street, gutter, or storm drain.
- ◆ **DO** use a commercial car wash that recycles water or discharges it directly to the sewer for treatment.
- ◆ **DO** wash your car on a lawn, gravel driveway, or area where soapy water will not run into a street or storm drain.
- ◆ **DO** use soap sparingly if you must wash your car at home - even biodegradable soap is toxic to wildlife.
- ◆ **DO** pour your bucket of soapy water down the sink when you're done.
- ◆ **DO** use paper towels to wipe brake dust off of wheels before washing.
- ◆ **DO** choose a work area that is easy to clean up, with an impervious floor if possible.
- ◆ **DO** use plastic tarps and drip pans when your car is leaking, and when you're working on it. Fix leaks as soon as possible!
- ◆ **DO** use sawdust or cat litter for spills. For small spills, sweep the material up, bag it, and put it in the trash. For large spills, take the material to a Household Hazardous Waste Disposal center or collection day (visit [www.uwex.edu/erc/hazwste.html](http://www.uwex.edu/erc/hazwste.html) for a list of Household Hazardous Waste facilities and programs)
- ◆ **DON'T** drain or pour any auto fluid onto the street or into a storm drain.
- ◆ **DON'T** mix coolant with other auto fluids. They are not recyclable when mixed.
- ◆ **DON'T** use spray-on wheel cleaners or rinse them off, if the rinsewater will flow into the street or storm drain.
- ◆ **DON'T** hose down your work area!

*Modified from the City of Monterey Public Works—Stormwater Management Program*

**REMEMBER any drips or spills left in a street or driveway can flow to a storm drain and into a lake or stream!**



## Public Service Announcement - Car Washing (June 2005)

So, you've taken the kids up north and even visited your in-laws, but with all the construction you went through your car has seen better days. You have decided that this weekend washing the car and changing the oil is on top of the To Do List.

However, cleaning your car at home can have some serious impacts on the environment. If you do choose to wash the car at home, do so in an area where soapy water will not run into a street or storm drain. Use soap sparingly and pour your bucket of soapy water down the sink when you are done. Use paper towels to wipe brake dust off the wheels before washing. Another option is going to a commercial car wash that recycles the water or discharges it directly to the sewer for treatment.

If you change your oil at home, recycle the oil and dispose of all fluids properly. Don't pour any fluids into the storm drain, this could end up in our lakes and streams. This is how you can continue to make the environment a better place for your kids (and even your in-laws).

The Northeast Wisconsin Stormwater Consortium is a partnership of area communities working together to educate you on how we can make great strides in protecting and enjoying our environment.