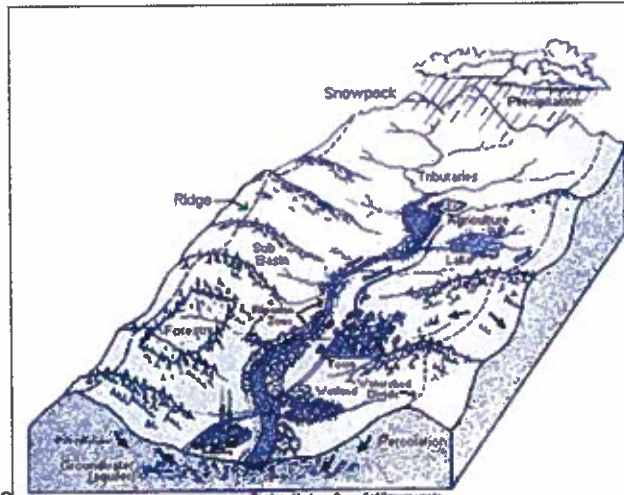




Storm Water Education for the Public

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Q1: What is a watershed?

A: A watershed is a defined land area that captures rainfall and other precipitation and funnels it to a particular river, lake or stream. Watersheds come in all shapes and sizes. They cross county, state, and national boundaries. No matter where you are, you're in a watershed! (Surf your watershed!)

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Q2: What is storm water?

A: Storm water is rainfall that flows over our yards, streets, alleys, parking lots, and buildings and enters the storm drain (or gutter) in your street.



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Q3: What is a storm drain?

A: Storm drains are the openings (gutters) you see along curbs and in streets and parking lots. They collect rainwater to keep the street from flooding, and then carries the water through the storm drain system to nearby waterways, like streams, rivers, and lakes. Water, trash and other debris that enter storm drains do NOT go to a treatment facility, they empty directly into the nearest waterbody.

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Q4: How does storm water get into our rivers and streams?

A: Storm water runs off our streets, parking lots, and yards and into drainage ditches, gutters, storm pipes, and other drains, which transport the storm water directly to our creeks, lakes and the Trinity River.



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Q5: How does storm water get polluted?

A: As storm water flows over the ground and into the nearest storm drain, it picks up fertilizers, motor oil, industrial chemicals, grass clippings, litter, pet waste, and anything else that might be in its path. The storm drain system then takes the water and pollutants straight into the nearest waterbody. Some people illegally dump trash, yard clippings, used cooking oil, motor oil, and other pollutants into storm drains, adding to the contamination. Anything that goes into a storm drain will eventually empty into the nearest creek, lake, or river. It does NOT go to a water treatment facility.

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Q6: What are some examples of pollutants in storm water?

A: As rainfall runoff moves over and through the ground, it picks up and carries away natural and human-made pollutants, these pollutants include:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas
- Motor oil, grease, paints, soap, pool chemicals and other toxic chemicals
- Grass clippings and yard waste
- Sediment (dirt) from improperly managed construction sites, crop and forest lands, and eroding streambanks
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems and wastewater collection system facilities



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Q7: What are the effects of these pollutants on our waters?

A: States report that storm water pollution is the leading remaining cause of water quality problems. The effects of storm water pollution on specific waters vary and may not always be fully known. However, we know that these pollutants have harmful effects on drinking water supplies, recreation, and wildlife.



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Q8: How is storm water different from wastewater?

A: The wastewater collection and storm water systems are separate. Wastewater is the used water that drains from toilets, sinks, household drains, and some industrial drains. The wastewater travels through wastewater collection pipes to a wastewater treatment plant where it is treated to strict quality standards before it is released into a water body. Water that goes into the storm water system does NOT go to a treatment facility.

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Q9: Do cities in North Central Texas treat storm water?

A: No, storm water is not treated by any local government in North Central Texas. It drains untreated directly into the nearest creek, river, or lake where you live.

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Q10: What is illegal dumping?

A: It is illegal to dump garbage anywhere other than a legally authorized location. Dumping garbage in places like along a roadside, in a ditch, storm drain or in a vacant lot is against the law. It's illegal to let anyone dump garbage on your property and littering is also against the law. Punishments for illegal dumping can include fines, jail time, and loss of the vehicle used by the violator.

Dumping trash in unauthorized locations can lead to a number of health and safety concerns and can become a storm water problem. Improperly disposed waste can be picked up by storm water and carried into our local waterways, harming water quality. Illegal dumping also fosters a negative image in a community. People are much more likely to dump on property where a dumpsite already exists. Not to mention the high costs for clean-up can run into the thousands or even millions of dollars! When county workers clean up litter and illegal dumps, your tax dollars are spent to clean up somebody else's garbage and cannot be used for other, more urgent needs. [Learn more about illegal dumping in North Central Texas.](#)

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Q11: What can I do to prevent storm water pollution?

A: We can all work together to reduce and prevent storm water pollution. Some activities are federal government responsibilities, such as ensuring that federal lands are properly managed to reduce soil erosion. Some are state responsibilities, for example, developing rules to govern certain activities to protect waterbodies. Others are best handled by your community, such as by developing zoning or erosion control ordinances. And each individual can play an important role by changing certain everyday habits. For example:

- Please don't feed the storm drain! Do not dispose of used cooking oil and grease by dumping it into the storm drain. Learn more about proper disposal.
- Select native and adapted plants that require less water, fertilizer, and pesticides to thrive, making your yard a Texas SmartScape.
- Apply lawn and garden chemicals sparingly and according to directions. Never apply lawn chemicals before a rain event.
- Keep litter, pet wastes, leaves, grass clippings and debris out of street gutters and storm drains. Outlets blocked by excessive debris, such as leaves and grass clippings, could lead to flooding of your street.
- Compost or mulch lawn debris instead.
- Dispose of used motor oil, antifreeze, paints, and other household chemicals properly, not in storm drains. If your community does not already have a program for collecting household hazardous wastes, ask your local government to establish one.
- Deck the halls, not the creeks! By recycling litter and disposing of trash properly you can help keep it out of waterways.
- Clean up spilled brake fluid, oil, grease, and antifreeze. Do not hose them into the street where they can eventually reach local streams and lakes.
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas. Consider using mulch for soil stabilization.
- Encourage local government officials to develop construction erosion/sediment control ordinances in your community.
- Wash your car at a commercial car wash facility, or if you can wash it on the lawn. Washing cars on driveways or treets will result in the cleaning products to flow directly into the storm drain and into a nearby stream, lake, or river. By washing your car on the lawn, the soil will remove some of the pollutants; and using a commercial car wash facility will ensure that the water and pollutants go to a water treatment facility before entering local water bodies.
- Learn to recognize what types of discharges to the storm drain system are not allowed and report any signs of illicit (illegal) discharge to your municipal storm water management service.

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Q12: Who can I contact to obtain more information about storm water in my city?

A: Storm water management in your city may be handled by the public works, health, engineering or environmental management department. Search a listing of storm water contacts by city, county or watershed.

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Sources: City of Dallas Brochure, Publication No.97/98-71; EPA's Polluted brochure, EPA-841-F-94-005, 1994, <http://www.epa.gov/owow/nps/whatudo.html>; TCEQ publication GI-243/ (5/98); and NCTCOG "Stop Illegal Dumping" brochure