

Pet Waste Management

Pets, including cats and dogs, are part of the family in more than half of the households in the United States. The North Central Texas Council of Governments reports that about 1.2 million dogs live in the 16-county North Central Texas region. The U.S. Food and Drug Administration estimates the average dog produces three-quarters of a pound of waste each day. In North Texas, that's about 1 million pounds of daily dog waste.

Pet waste can lower the quality of the water supply because it contains potentially harmful fecal coliform bacteria, viruses and other disease-causing organisms. In addition, nutrients in pet waste can contribute to aquatic plant growth that can deplete oxygen in the water and cause fish kills.

How Does Pet Waste Enter Waterways?

Storm water flows wash pet waste into bodies of water. In its natural state, the land can hold and absorb much of the rain that falls, but as urban areas expand and more soil surface is covered, more pet waste is washed into open waters through these storm flows. Because housing, business and road development covers land with impervious surfaces, less rainfall is absorbed into the soil in urban areas and more rainwater runs off.

Risks Associated with Pet Waste

Pet waste contains bacteria, viruses and parasites that can harm humans. People come into contact with pet waste via outdoor pets, children at play, yard work and even flies.

According to the University of Wisconsin's Extension publication, *Pet Waste and Water Quality*, these diseases or parasites can be transmitted from pet waste to humans:

- **Campylobacteriosis:** A bacterial infection carried by dogs and cats that frequently causes diarrhea in humans.
- **Cryptosporidium:** A protozoan parasite carried by dogs, cats, mice, calves and many other mammals. Common symptoms include diarrhea, stomach cramps, nausea and dehydration. May be fatal to people with depressed immune systems.
- **Toxocariasis:** Roundworms usually transmitted from dogs to humans, often without noticeable symptoms. May cause vision loss, rash, fever or cough.

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- **Toxoplasmosis:** A protozoan parasite carried by cats that can be a hazard for pregnant women because it can cause birth defects in the fetus, including mental retardation and blindness; also a problem for people with depressed immune systems. Symptoms include headache, muscle aches and lymph node enlargement.

What to do with Pet Waste

Leaving pet waste to decay in the yard can cause unintended problems. Beneficial microorganisms in the soil can break down pet waste into nutrients that can be used by plants. However, pet waste left near areas of water flow—such as medians along roads and storm sewers, or areas near lakes, waterways, ditches and drainage ways—should be picked up and disposed of properly. In these areas, storm water flows can easily wash pet waste into waterways before microbes can break down the harmful bacteria and pathogens. Pet waste should also be removed from any area that has a high chance for human contact, such as parks, playgrounds or gardens.

Pet Waste and Water Quality offers three ways to properly dispose of pet waste:

- **Flush it down the toilet.**

Waste that is flushed down the toilet goes to a municipal treatment plant or an onsite wastewater treatment system that will adequately treat the waste before it reaches the environment. Flushing anything that cannot be consumed by the microbes in the wastewater treatment system can cause costly problems to plumbing or wastewater treatment system. Cat litter, rocks and plastic should not enter an onsite wastewater treatment system.

- **Bury it in your yard.**

Dig a hole or trench at least 5 inches deep away from any area where water commonly flows. In order to limit the possibility of human contact with harmful pathogens in pet waste, do not bury the waste near vegetable gardens. Do not put it in the compost pile because the temperature there will not be high enough to kill harmful bacteria and other organisms.

- **Throw it in your trash.**

Throwing pet waste in the trash is easy but not necessarily the best solution. In addition to local laws or ordinances that may ban this, once the waste reaches the landfill, it can harm the environment.

Another solution is to install a pet waste composter. Check local regulations to ensure the legality of the installation. If so, be sure the composter is installed properly. Pet waste composters can be built from a few readily available items and are also available commercially. The final composted waste may still contain harmful bacteria and other microorganisms if proper temperatures are not achieved.

References

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