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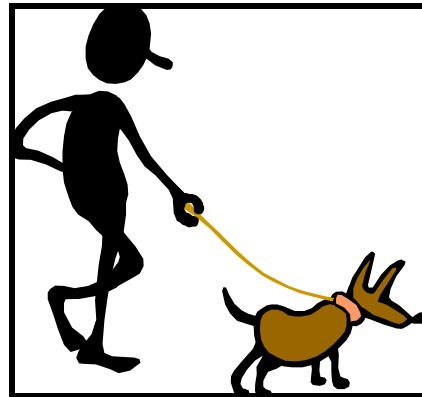
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*Protecting groundwater and surface
water quality within the District*

**Gallatin Local Water
Quality District**

**Dog Waste
and
Water Quality**



**Summer 2013
Gallatin County, Montana**

**DOG WASTE AND
WATER QUALITY**



You probably hear it all the time, “Pick up after your dog!” Whether you are hiking on a local trail, playing with your dog in a park, or just in your own backyard, it is important to clean up after your pooch. Dogs may be “man’s best friend”, but their poop is not.

Dog waste left along the trail, sidewalk, street or even your own yard, can introduce pollutants that may be washed into local streams by rain or melting snow. The storm drains in Bozeman drain **directly** into Bozeman Creek, carrying a variety of pollutants, including dog waste, into the water. Even shallow groundwater can be impacted in areas with concentrated dog waste.

Why is dog waste a problem?

- **Dog waste can transmit disease.** This makes water unsafe for recreating; for both you and your four-legged friend.
- **It is hard on water quality.** Just like lawn fertilizer, dog waste contains nutrients that encourage algae growth in streams. Too much of these nutrients can increase algae growth making the water unattractive for recreating. When the algae decays, it uses up oxygen in the water which can stress fish or kill them in combination with warm water temperatures.



Did you know? Bozeman Creek water quality is impacted by excess nutrients and high levels of *E. coli* bacteria. *E. coli* is an indicator of fecal contamination including dog waste. The Montana Department of Environmental Quality has listed Bozeman Creek as “impaired” and not meeting water quality standards.

DOG WASTE AND WATER QUALITY

What are the health risks?

Dog waste can carry a variety of infectious organisms like viruses, parasites and harmful bacteria. Improper disposal of dog feces is not only unappealing, but can pose a health risk to humans and other dogs. Some of the disease or parasites that can be transmitted from dog waste to humans include:

Hookworms and Roundworms: Intestinal parasites that infect dogs. They can be transmitted to humans through contact with dog waste. **Toxocara canis** is a common parasitic roundworm in dogs that can cause Toxicariasis in humans. Symptoms include fever, breathing problems, stomach pain, vision problems, eye pain and redness.

Campylobacter: This bacteria causes a disease called Campylobacteriosis and is found in dog feces. It can cause diarrhea, fever, cramps, nausea and vomiting in humans.

Giardia: Common infection in dogs. The protozoan can be transmitted to humans through contact with pet waste. A common source of infection is from contaminated outdoor water. Giardia can cause severe diarrhea in humans.

Cryptosporidium: A protozoan carried by dogs and other mammals. Symptoms include diarrhea, nausea, stomach cramps and dehydration.

Salmonella: This bacteria can be transmitted to humans through contact with dog waste. Symptoms include diarrhea, fever and abdominal cramps.

Canine Parvovirus: This species of parvovirus only infects dogs and is not transmittable to humans. Humans can transmit the virus from dog to dog simply by stepping in dog feces and transporting it on their shoes. It is a highly contagious viral illness in dogs.



Is dog waste a good fertilizer?

No! The health hazards associated with dog waste are greater than any potential benefits from its fertilizer value.

Can I compost the dog waste?

No. NEVER add dog waste to your compost pile. The pile will not get hot enough to kill disease-causing organisms in the dog waste.

What can I do to make a difference?

Dog waste may not be the largest or most toxic pollutant in our streams, but little by little it adds up. The U.S. Environmental Protection Agency has dog waste listed as a nonpoint source contaminant along with oil, grease, herbicides and pesticides.

(EPA-841-F-04-005)

Dog ownership involves a lot of responsibility. But, the task of cleaning up after “Fido” can be as simple and painless as taking a plastic bag or pooper scooper along on your next walk or outdoor adventure with your pooch. The tricky part is deciding what is the best way to properly dispose of the dog waste after you have picked up after your pet.

Although no option for disposal is perfect, there are a few choices:

- **Put it in the trash.** This is probably the easiest to do. Put the waste in a securely closed bag and deposit it in the trash. Many of our local trailheads have doggie waste bag stations making it easy to take a couple with you at the beginning of your hike and then you can deposit the bag in a trash receptacle back at the trailhead. Leaving the bagged waste by the side of the trail does not solve the problem.



Nonpoint source contaminants are pollutants that originate from numerous small sources over a large area of the landscape.

Leaving bagged dog waste by the side of the trail does not solve the problem of picking up after your dog.

- **Bury it in the yard.** Microorganisms in the top layer of soil break down the waste and release nutrients to fertilize nearby plants. Dig a hole or trench that is:
 - at least 5 inches deep;
 - away from vegetable gardens (do not compost it);
 - away from any stream, irrigation ditch or well.
- **Flush it down the toilet.** Probably not the best solution. The water from your toilet goes to a sewage treatment plant that removes some pollutants before the water reaches a stream or the groundwater. If you are on a septic system, this option is discouraged.



By doing our part to keep dog waste off our trails and out of our local streams, we can improve water quality and help to protect human and pet health from unnecessary infections and disease.