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Dog Waste: Protecting your Family, your Pets and the Environment

By Bob Simmons & Darcy McNamara, Jefferson/Clallam County Extension.

All photos: Leslie Wright. Updated from Shore Steward News from 2010 by McNamara & Chrys Bertolotto.

People love dogs; it's estimated there are 72 million dogs in the America. Guess how much waste all of these pets produce? Using a conservative estimate, more than **8 billion pounds** a year! That's a lot of poop.

According to the American Veterinary Medical Association there are an estimated 1.6 million dogs in Washington State and 1 million of them live in the Puget Sound area. Using a conservative estimate, of a third of a pound of feces each day per dog, more than 183 tons of waste is generated daily. That's an astounding 66,795 tons of waste per year, just in the Puget Sound region alone. Just think what it would be like



Charlie's glad people pick up after their dogs at Port Williams.

if people didn't pick up after their dogs!

Aside from being smelly and unsightly, dog waste can also be a health hazard. Fido's droppings can contain disease causing organisms and viruses that make people and pets sick, as well as pollute the water. Fortunately, it's easy to protect yourself, your pets and the environment by scooping dog waste, bagging it and putting it the trash.

Table 1. Estimated Amount of Pet Waste Produced in Puget Sound

County	Number of dogs	Annual Waste –lbs*
Clallam	16,750	2,017,486
Island	18,561	2,235,711
Jefferson	6,994	842,463
King	482,916	58,167,273
Kitsap	59,481	7,164,441
Mason	13,971	1,682,762
Pierce	193,464	23,302,730
San Juan	3,670	442,050
Skagit	27,781	3,346,180
Snohomish	176,912	21,308,999
Thurston	61,819	7,446,110
Whatcom	48,697	5,865,507
All Puget Sound	1,111,015	133,821,712
United States	72,579,411	8,742,190,008

*based on pet waste weight of 0.33. Sources: Population estimates U.S. Census Bureau. (July, 2016). Retrieved from: www.census.gov/quickfacts/; Dog ownership estimates – American Veterinary Medical Association. Retrieved 3/15/18 from: www.avma.org/KB/Resources/Statistics/Pages/Market-research-statistics-US-pet-ownership.aspx.

Even cute dogs can have germs



Puppies are more at risk for having diseases that can be passed by feces from dog to dog and dog to people.

It's important to know that dogs sometimes carry harmful germs that can make people and other dogs sick. A dog may not even look or act sick and still carry harmful bacteria or parasites.

Most human illnesses from pet waste are caused by tiny, often invisible amounts of fecal matter that enters the body through the mouth. Children are especially at risk because they play on the ground and frequently put their hands in their mouths. Fecal material can also be accidentally swallowed while swimming in water that looks clean but is polluted or eating shellfish that has been contaminated by dog waste left on a beach.

Freshly deposited dog droppings that contain harmful bacteria and parasites such as Salmonella,

Campylobacter or Giardia cysts, are immediately infectious to people. But older, dried-out or disintegrated dog waste is **more likely** to contain harmful parasite eggs. For example, hookworms take 6-12 days to become infectious and may survive up to 3-4 weeks in the environment. Roundworm eggs must age a week or more in dog stool to become infectious. If feces are washed into the soil and allowed to disintegrate into the ground, parasite eggs can remain viable for years, resulting in long-term contamination of the soil. In addition to posing a threat to human health, dog waste can also harm other pets and animals. Coccidia are parasites that are spread through fecal matter; puppies are most at risk and the disease can be deadly. Parvovirus is transmitted from dog to dog through contact with feces and can be life threatening. It is highly contagious due to its hardiness and ability to remain infectious for many months.

Which way to the water?

When it rains, storm water runoff transports pollutants and pet waste pathogens, bacteria, and excess nutrients from upland areas to nearby streams, rivers, lakes, and coastal waters.

Fecal matter contains nutrients such as nitrogen and phosphorus which act as fertilizer for algae and other aquatic plants. Overgrowth depletes oxygen, impacting fish and other aquatic life.

Bacteria and other pathogens can contaminate shellfish, which feed by filtering the water. People who eat shellfish harvested from the area can become sick.

The closer dog waste is deposited to water (or a transport conduit such as a stormdrain or roadside ditch), the higher the chances pet waste will reach the water and cause pollution. The concentration



Sniper appreciates clean water when cooling off at Cline Spit.

of bacteria from dog waste that reaches a water body is influenced by the frequency and amount and of fecal deposits and their distance from the water. Vegetation or other barriers between the dog deposit and the water, the size and frequency of rainfall events large enough to transport waste particles, the amount of viable contaminants in the dog feces, the soil type, and the evaporation rate also play a role in contamination.

It's important to note there are other sources of fecal pathogens, such as failing on-site septic systems, stormwater, boat waste discharge, wastewater treatment plant malfunction, sewage overflows, and waste from other animals, including wild animals and birds. Waste from birds, seals, and other wildlife is virtually impossible to control. However, it's up to individuals to maintain their septic systems and properly manage livestock and pet waste.

Emerging issues in pet waste research include air pollution from bacteria from dog feces in wintertime air, contaminated beach sand, findings of diseases being passed between humans and dogs, and drug resistant bacteria in dog feces.

Good news! It's easy to prevent all these problems!

Scoop it, bag it & put it in the trash.

Grab a pet waste bag and....

- Place your hand on the inside of the bag like you're putting on a glove.
- Pick up the dog waste & turn the bag inside out with your free hand.
- Secure the bag, ensuring it is tied tightly so it doesn't open when thrown away.
- Put the bag in a trashcan if one is available or take it home & put it the garbage.

Tips for dealing with dog waste:

Prevent your dog from pooping near water or a storm drain or ditch. If you can't, it's extra important to pick up any waste that can get to water to prevent pollution.

Leave no trace. If there is no trashcan, take the bag home. Never leave bags by the side of the trail or toss them into the woods. This just creates two kinds of pollution – pet waste AND plastic waste!

Biodegradable bags are not necessary. Once in the landfill the plastic may not ever decompose, even if it is biodegradable, making these bags unnecessary.

Bring an extra bag. Offer a bag to someone who forgot theirs and consider picking up waste left behind by others. Lead by example in taking care of our parks and natural areas. You and your dog will be heroes!



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