Pet Waste a Water Quality Problem

By Jay Halepeska, Water Program Manager

It might not seem like a stormwater problem, but animal waste is one of the many seemingly small sources of pollution that can add up to big problems for water quality, and even human health. Animal waste contains two main types of pollutants that harm local waters: nutrients and pathogens. When this waste ends up in water bodies, it decomposes, releasing nutrients that cause excessive growth of algae and weeds. This makes the water murky, green, smelly, and even unusable for swimming, boating, or fishing. The decomposing animal waste also uses up oxygen dissolved in the water body, causing low dissolved oxygen levels that can be lethal to aquatic life.

The pathogens, disease causing bacteria, parasites, and viruses, can also cause beaches and shellfish beds to close, and have caused severe illness in humans. A few of the common infections caused by pet waste contamination of land and water are:

- Campylobacteriosis a bacterial infection that causes diarrhea in humans.
- Giardiasis A protozoan infection of the small intestine that can cause diarrhea, cramping, fatigue, and weight loss.
- Salmonellosis symptoms include fever, muscle aches, headache, vomiting, and diarrhea.
- Toxocariasis an animal-to-human infection that is caused by roundworms found in the intestines of dogs. The parasite can cause vision loss, rash, fever or cough, and is particular threat to children exposed to parasite eggs in sand and soil.

All three of the bays (Oso, Laguna Madre, & Corpus Christi) surrounding Naval Air Station Corpus Christi are listed on the Texas Commission on Environmental Quality (TCEQ) 2020 Texas Integrated Report – Texas 303(d) List (Category 5). Which describes the status of Texas' natural waters based on historical data and weather they meet Texas Surface Water Quality Standards. Corpus Christi Bay is listed as impaired for bacteria in water at recreational beaches (Cole Park, Ropes Park, and Poenisch Park). Oso Bay is impaired for depressed dissolved oxygen and bacteria in oyster waters. Laguna Madre is impaired for bacteria in water, depressed dissolved oxygen in water, and bacteria in oyster waters (adjacent to the Arroyo Colorado confluence).

As you can see, pet waste entering our bays can contribute to current water quality issues. We can all do our part to ensure that local parks, yards, and bays are not contaminated by pet waste by simply pick up our pet's waste at home and while out in the community and properly disposing of it in the garbage. Never throw pet waste down a storm drain and never place wastes from meat eating pets in compost piles because the parasites, bacteria, and viruses are not readily destroyed during the composing process and can be passed on to humans. For any stormwater related issues or additional information please contact Public Works Environmental Division at 361-961-5363.