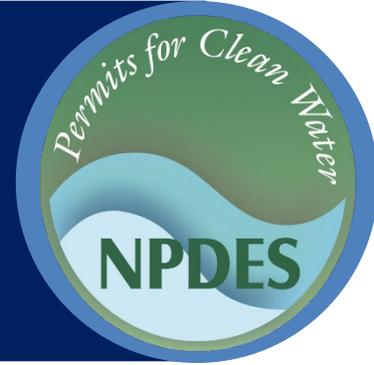




Stormwater Best Management Practice

Pet Waste Management



Minimum Measure: Public Education and Outreach on Stormwater Impacts
Subcategory: Education for Residents

Description

Stormwater can pick up pet waste that pet owners leave on the ground and deposit it directly and/or via a storm sewer system into nearby streams, lakes and rivers. Pet waste in waterbodies can make people and animals sick, promote weed and algae growth, and damage the health of the ecosystem in and around the water. Pet waste is a leading source of nutrient and bacteria pollution in urban streams and waterways (Wood, 2017). With pet owners living in virtually all communities, pet waste management is a challenge for most municipalities. Educating the public about the dangers of improperly managed pet waste is imperative to preventing urban pollution. This fact sheet presents a variety of approaches that municipalities can use to educate their residents and promote responsible pet waste management.

Understand Community Knowledge Gaps and Current Practices

To launch an effective pet waste education program, municipalities can first determine the community's baseline of knowledge on the topic. Some pet owners may not understand how pet waste pollutes waterways; others may have misconceptions that lead to improper waste management, such as the idea that dog waste is an "all-natural" fertilizer and that it will "take care of itself" (Lyons-Bastian, n.d.). Municipalities can assess knowledge gaps through such means as community surveys, focus groups or analyses of complaint calls to municipal departments (see [Soliciting Public Opinion](#) fact sheet).

Municipalities can also gather information about residents' current methods of managing pet waste and potential barriers to proper disposal. For example, do people properly dispose of pet waste around their homes, but throw pet waste bags on the ground in a public park because there are no bags or trash receptacles available? Or do they pick up after their pets in public areas, but not in their own yards? The municipality can build on such insights to design programs and messages that effectively promote proper pet waste management.



The Greenville, South Carolina, Soil & Water Conservation District has invested in a full campaign of education and community support. Starting with the slogan "There is no poop fairy," the district developed graphics that now brand its printed material and social media communications.

Photo Credit: Greenville County Soil & Water Conservation District

Determine a Program Approach

After municipalities have identified the knowledge gaps and barriers, they can then craft their pet waste management programs. An education program may involve many elements, such as posting and distributing educational materials, implementing laws and ordinances, designing a social marketing campaign, installing permanent structures, or a combination of methods.

Post and Distribute Educational Materials

Municipalities can address knowledge gaps by posting and distributing educational materials. They can distribute materials by posting signs in areas where people bring their pets, including flyers in water bills and handing out brochures at community events. Municipalities can tailor the information to the community based on relevant topics, motivators and knowledge gaps to engage and educate the audience. For example, the brochure that Thurston County, Washington developed gives instructions about proper waste management, relates the topic to the county's shellfish population and beaches, and provides links to resources for more information.

Implement Laws and Ordinances

Municipalities may find in a survey that most residents understand why improper disposal of pet waste is a problem, but they may not understand the urgency of the situation. Some communities have enacted an ordinance ensure residents properly manage their pet's waste. Many communities have pooper-scooper laws that mandate pet waste cleanup and may require anyone who takes an animal off their property to carry a bag, shovel or scoop. Some of these laws also include fines that may increase for each reoccurring offense.

For examples of city ordinances, see the following:

- [City of Alexandria, Virginia](#)
- [City of Fort Lauderdale, Florida](#)

Design a Social Marketing Campaign

Municipalities may want to implement a social marketing campaign to connect with their residents in a more personable way or to provide reminders by repetition. A social marketing campaign influences communitywide change by forming marketing tools based on the community's motivators, barriers and perceived benefits (Bergeson, n.d.). A municipality can implement a campaign through social media, municipality websites and branding in distributed materials (e.g., emails, letters, signs). For example, Jefferson County, Colorado, received a high volume of complaint calls about pet waste, despite the city ordinance requiring pet waste management. County officials launched an educational campaign to engage their community in a unique way by creating a [lighthearted video starring a county sheriff](#), which communities across the country have duplicated. The county shared the video on social media, and it reminds the viewer of the importance of pet cleanup while providing entertainment.

Install Structures

Installing permanent structures can be an effective way for a municipality to help overcome barriers while still providing an opportunity to educate. Communities may install trash containers, garbage bag receptacles and dog parks designed for easy waste management. Placing educational signs next to these structures will inform pet owners of the importance of pet waste management, describe the purpose of the structure, and provide contact information for municipality representatives who can answer questions from the public. Municipalities can post maps leading to these

structures throughout common walking routes and parks to encourage usage.

For examples of permanent structures, see the following:

- **Pet waste stations**—Stations that include trash bag dispensers, public signs that encourage pet waste management, and trash bins.
- **Doggy loos**—Small disposal units that property owners install in the ground at homes or in personal yards. Decomposition occurs in the unit, and it requires little maintenance (Massachusetts Clean Water Toolkit, n.d.).
- **Pooch patch**—A pole placed in a park with a thin layer of sand surrounding it. Disposal bins are located around the pole. This practice encourages defecation in a single location with easy waste disposal (Massachusetts Clean Water Toolkit, n.d.).
- **The “long grass principle”**—Long grass is naturally more attractive to dogs. Similarly as with pooch patches, municipalities can let grass grow in locations close to pet waste stations to encourage defecating in an area with convenient waste disposal resources (Massachusetts Clean Water Toolkit, n.d.).

Evaluate Program Effectiveness

Municipalities can continuously evaluate pet waste management programs for effectiveness using several methods. A “before and after” community survey can evaluate how the community's baseline of knowledge has or has not shifted. Municipalities can use focus groups and evaluate the number and nature of complaint calls relating to the occurrence of pet waste management to understand public opinion on the topic. Furthermore, a municipality can design a focused monitoring plan to take fecal coliform samples before and after the program to observe if residents' behaviors are truly changing. If the results of these evaluations do not show improvement, municipalities can reassess their communities' knowledge and barriers and alter their designs as needed.

Additional Resources

The [University of Maryland Open Learning website](#) offers a course designed to help municipalities implement pet waste management programs.

Additional Information

Additional information on related practices and the Phase II MS4 program can be found at EPA's National Menu of Best Management Practices (BMPs) for Stormwater website

References

- Bergeson, C. (n.d.). *Behavior change handbook*. Anne Arundel County Watershed Stewards Academy.
- Greenville County Soil & Water Conservation District. (n.d.). *Pet waste*. Greenville County Soil & Water Conservation District.
- Lyons-Bastian, C. (n.d.). *The Raleigh scoop: Attitudes and behaviors in dog waste removal*. North Carolina State University.
- Massachusetts Clean Water Toolkit. (n.d.). *Pet waste management*. Massachusetts Department of Environmental Protection.
- Wood, D. (2017). *Be a Chesapeake Bay retriever: Designing effective outreach programs to reduce pet waste*. Chesapeake Stormwater Network.

Disclaimer

This fact sheet is intended to be used for informational purposes only. These examples and references are not intended to be comprehensive and do not preclude the use of other technically sound practices. State or local requirements may apply.