

FECAL BACTERIA BEST MANAGEMENT PRACTICES (BMPs)

► Domestic Animals

OVERVIEW

Pets and other domestic animals can be a source of fecal bacteria in urban storm water runoff. While natural wildlife can contribute fecal bacteria to waterbodies, pets are not a part of the natural ecosystem and their waste can be problematic due to the concentration of pets in an urbanized area coupled with high levels of runoff from constructed surfaces. For example, when pet owners leave behind pet waste in a public park or dog park, storm water runoff can quickly carry the waste to a nearby waterway. Properly managing the disposal of pet waste can help reduce the levels of fecal bacteria in surface waters.



Photo credit: Wisconsin DNR



Photo credit: Wisconsin DNR

Additionally, livestock and poultry, sometimes allowed in the context of urban agriculture or included on small ranches or farmsteads upstream of urban areas, can be a source of fecal bacteria. When animals are near poorly buffered streams, manure can enter waterways and elevate fecal bacteria levels.

Individuals can reduce bacteria discharges by properly managing the waste of household livestock.

Municipalities can limit the number of animals and require a buffer or other runoff management practice between enclosures and conduits to surface water. Another concentrated source of fecal bacteria to consider in your community may come from domestic animal facilities such as dog daycare, kennels or zoos. Fecal bacterial

discharges can be reduced by providing buffer strips between animal waste sources and drainage features and appropriate waste management and disposal.

IMPLEMENTATION

Create Local Ordinances Regulating Pet Waste

Ordinances could require that pet owners pick up pet waste and carry the equipment necessary to do so when they are out with their pet(s). Please see “Additional Resources” below for ordinance language examples.

- Ordinances would introduce consequences, such as fines.
- Enforcement tools can help change an individual’s behavior.
- This would require advertising such as signs, brochures and newspaper articles to make residents aware that the ordinance exists.
- Enforcement of the ordinance may be difficult for municipalities that may have budgetary/staffing issues.

Install educational signage in public places

Signs can help educate residents about why it’s important to pick up pet waste. These signs could include information about how picking up pet waste helps improve local water quality.



Photo credit: Wisconsin DNR

- This helps raise awareness of the impacts of pet waste on water quality (e.g., fecal bacteria, nutrients).
- Complements ordinances regulating the disposal of pet waste when signs include information about an ordinance.
- Without ordinances, this only relies on individual responsibility where pet owners may be less likely to change their behavior.

Provide Pet Waste Stations Where Pets Are Walked

Set up pet stations with bags near trash cans so pet owners can pick up waste even if they forget to bring bags.

- Avoids the issue of residents not picking up waste because they don't have bags.
- Would need to ensure that bags are stocked and trash cans are emptied out as needed.
- Pet waste stations could also include educational signage regarding pet waste ordinance.



Photo credit: Wisconsin DNR

Practice Proper Trash Receptacle Maintenance

When pet owners dispose of waste in municipal trash receptacles, fecal bacteria can accumulate inside. If trash receptacles leak and aren't cleaned often, contaminated water could leak from trash receptacles.

- Practice good housekeeping activities such as emptying regularly, monitoring receptacles for cracks and cleaning receptacles in an environmentally friendly way.
- Consider using trash cans that are sealed and watertight. For more information on trash receptacle BMPs visit the "Managing Trash Receptacles" BMP within the MS4 BMP Menu under the Total Maximum Daily Loads (TMDL) and Impaired Waters section.

Adopt A Municipal-Wide Ordinance Regulating Backyard Farming

Many ordinances limit the number of animals and/or proximity of animal enclosures to nearby waterways.

If your community already has an ordinance limiting the number of animals, consider adding regulations establishing a minimum distance from waterways or proper animal waste disposal methods. Please see "Additional Resources" for ordinance considerations.

- Changes to ordinances would require officials to inform existing animal owners of said changes. This could be done through letters or media releases.

- We need to consider how this will be enforced. Will it be complaint-based or will facilities be inspected?

Encourage Residents With Small Ranches Or Farmsteads To Properly Dispose Of Manure

Proper disposal methods include placing waste in a sealed trash receptacle or composting at home or with a pickup service. Residents should not compost pet waste or waste from non-herbivorous animals such as pigs.



Photo credit: Wisconsin DNR

- If composting manure at home, homeowners should not pile manure in an open area due to the risk of runoff. Instead, consider purchasing a closed composting bin. If creating manure piles, the storage facility must meet the Wisconsin technical standard for manure storage facilities (watertight and structurally sound). For more information on manure management, please visit this webpage: [Agricultural performance standards and manure management prohibitions](#).
- Collection services generally don't accept manure from non-herbivorous animals (e.g., dogs, cats, pigs) and waste should be thrown in the trash.
- Composting at home requires education on how to properly compost.

Adopt Green Infrastructure Practices

Green infrastructure practices divert storm water onto pervious surfaces where it can infiltrate and filter pollutants. In this case, vegetation can filter fecal bacteria from animal waste before it enters storm drains or waterways. For more information about green infrastructure practices, visit the "Green Infrastructure" BMP within the MS4 BMP Menu under the Pollution Prevention Program.

Adopt An Ordinance Regulating Dog Kennel Waste Management



Ordinances can require that kennel facilities request a permit to operate. As part of the permit process, require that facilities store waste in a sealed container before properly disposing it. Also, consider adding a minimum distance between outdoor enclosures and waste storage facilities as well as surface water and nearby storm water inlets.

- Changes to an ordinance or new ordinance would require officials to inform existing kennel owners of changes. This could be done through letters or media releases.
- Need to consider how this will be enforced, will municipal staff need to implement routine inspections of facilities, how often inspections should occur, etc.

ADDITIONAL RESOURCES

Ordinances

- [Model Pet Waste Ordinance – State of Rhode Island](#)
- [Sample Pet Waste Ordinance – City of Newport RI](#)
- [Kennel License - City of Pewaukee](#)
- [Backyard Chickens: City Ordinance Example – Fort Collins CO](#)
- [City of Milwaukee Backyard Chicken Ordinance Brochure](#)
- [Suggestions for City Ordinances for Backyard Poultry - Michigan State University Extension](#)

Composting

- [Composting in Wisconsin | Wisconsin DNR](#)
- [Where to Compost in Wisconsin — Litterless](#)
- [Using Manure in the Home Garden – Wisconsin Horticulture](#)
- [County Provided Composting Seminars and Composting Bin Sales - Cuyahoga County](#)



Small Ranches Or Farmsteads And Manure Management

- [Wisconsin Runoff Rules – UW Extension](#)
- [Agricultural Performance Standards and Manure Management Prohibitions | Wisconsin DNR](#)

SOURCES

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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.

Last Updated: October 2024

