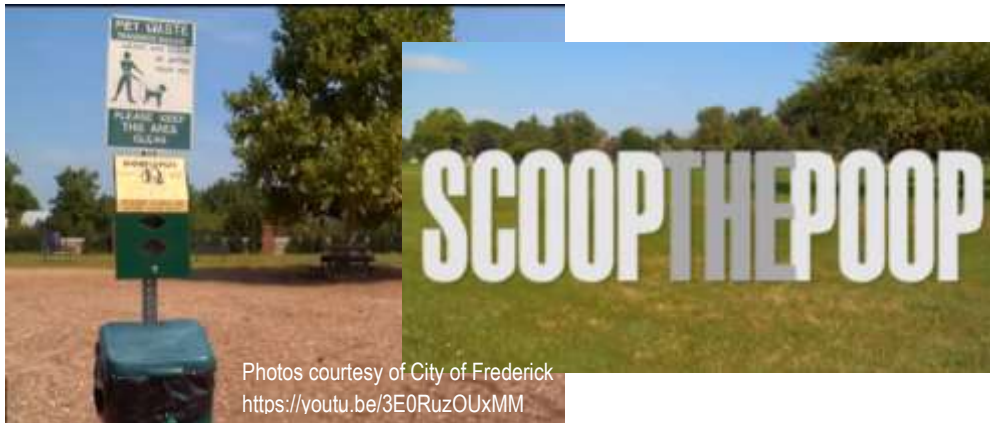


Recommendations for the City of Frederick Pet Waste Program



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City of Frederick**

**Report Prepared by
Center for Watershed Protection
Water Words the Work**

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INTRODUCTION

The City of Frederick, Maryland, downtown area has earned the reputation for being dog-friendly, as many businesses provide water bowls outside their shops and even allow leashed pups into their stores. The City also hosts a popular annual event called the “Dog Days of Summer” and there is a dog park located in the heart of downtown near Carroll Creek. The recent downtown revitalization efforts and increase in dogs has also increased the number of complaints to the Mayor’s office regarding pet waste. In addition to being a nuisance, pet waste is a water quality concern.

The City of Frederick received a Community Outreach grant from the Chesapeake Bay Trust and contracted with the Center for Watershed Protection (the Center) and Water Words That Work © (WWTW) to improve the effectiveness of their pet waste program to reduce the amount of pet waste left on the ground. The proper disposal of pet waste has the potential to keep nutrients and harmful bacteria from entering surface waters through the storm drains – thereby, helping to keep the City of Frederick streets and waters clean. The Center and WWTW based the recommendations on a behavior-change approach, rather than just education and outreach, to increase the number of pet owners that pick up and properly dispose of pet waste. It is expected that the behavior change approach is more effective than education and outreach programs that use generic messaging to the general public and lack methods to track the effectiveness of these types of campaigns. A behavior change approach targets a specific audience (Box 1) and tailors messaging and other materials (e.g. incentives or products) that address why people do or don’t adopt the desired behavior.

The Center and WWTW conducted a nationwide case study of pet waste programs, due diligence test panels to review pet waste education materials, and a targeted survey of City residents. This plan summarizes the recommendations to the City of Frederick for improving their pet waste program based on the results of these activities.

Box 1: How a Behavior Change Approach Sees the Population

Show Me: Also known as the ‘early adopters’ or people that readily adopt a behavior based on education and outreach.

Help Me: Members of the general public that may desire to adopt the desire behavior but haven’t done anything to change. A social marketing approach is most influential for this audience as it seeks to answer the questions “why” and “how” can this audience change their behavior.

Make Me: A regulatory or legal interventions are needed to adopt the behavior for example, through fines and ordinances.

Existing Pet Waste Program

The City's existing pet waste program includes both regulatory and voluntary elements. There is an ordinance that requires residents to pick up pet waste and to register and license their dogs (Frederick MD Code of Ordinances Section 3-26.1; Frederick County, Maryland under the provisions of Article II, Division 2, Section 1-5-33 of the Frederick County Codes as Amended in 1995), as well as a fine for not picking up waste. However, it is likely that further measures to increase the enforcement of these regulations is limited and efforts to engage the police to fine offenders above and beyond these regulations is not a priority for the City. There are 38 pet waste stations in public locations, mostly concentrated around the downtown area. In addition to these efforts, the City provides a "Scoop the Poop Pledge" that dog owners can sign promising to pick up their pet waste. In March 2015, the City's Facebook feed featured a "youtube" educational "scoop the poop" video that can be viewed at (<https://youtu.be/3E0RuzOUxMM>).

KEY FINDINGS

A case study review of selected pet waste programs identified a number of common barriers to adopt the desired behavior. The most common reasons pet owners do not pick up pet waste based on this review are:

- It's smelly and messy
- Pet waste is natural and is biodegradable/fertilizer
- My individual pile of pet waste isn't a problem
- It's in my yard
- Too much work/inconvenient/Don't want to carry bags

A survey of City residents and data analysis completed by WWTW and the Center identified additional issues that may contribute to the pet waste issue observed in the City. The results suggest:

- A small number of repeat offenders may account for a majority of the pet waste in public areas
- Pet owners are more likely to regularly pick up waste in public areas than in their own backyards¹
- Thirty-three of the 38 pet waste stations are found in the downtown area and stations are very limited elsewhere in the City such as in public and neighborhood parks
- There are a significant number of dogs that are not licensed

A review of the Frederick County database of registered dogs indicates that approximately 1,200 dogs are licensed in the City. Estimates of dog ownership from national data sources indicate that only 1 out of every 4 dogs are licensed, where INFOUSA and USADATA estimate there are more likely 5,500 to

¹ The majority of survey respondents reported almost always picking-up dog waste in public areas, but remove dog waste from their yards weekly, or less frequently. This behavior is consistent with findings from a pet waste survey in Snohomish County, WA

8,800 dogs in the City. This suggests that there are many unlicensed dogs in the City of Frederick and the total number of dogs is higher than previously estimated.

Despite the fact that the downtown area has the highest concentration of pet waste stations, survey participants identified the downtown area as the predominant pet waste problem area. Figure 1 illustrates places where pet waste is most commonly found in the City by the size of the font. That is, the larger size font indicates the most repeated location identified by survey participants for pet waste observed on the ground, or not disposed of properly. This suggests that the convenience of pet waste stations with pet waste bags are insufficient motivation for pet owners to pick-up their dogs waste. It is also likely that the small number of repeat offenders are part of the ‘make-me’ rather than ‘help me’ audience requiring more regulatory type of actions to change behavior. With a revised estimate of the number of dogs in the City and survey results of pet waste pick up behaviors, it is estimated that 110,000 lbs of dog waste annually is not picked up from the City of Frederick streets, sidewalks, yards among other places.

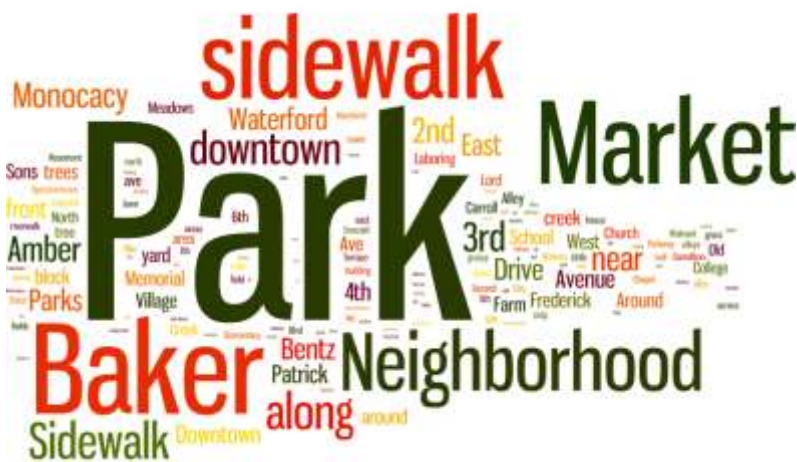


Figure 1. Hotspots identified for pet waste

WWTW received feedback from two test panels comprised of dog owners to evaluate the impact of the City of Frederick’s Pet Waste Pledge and pet waste pick-up videos.

Pet Waste Pledge

Currently, the Pet Waste Pledge has 155 individuals and families voluntarily committing to picking up their pet’s waste (<https://www.cityoffrederick.com/FormCenter/Scoop-The-Poop-23/Scoop-The-Poop-Pledge-73>, or approximately 13 percent of registered dog owners). Results of the test panel suggest the message conveyed by the pet waste pledge was fundamentally sound but lacks visual excitement and more convincing reasons for the larger population of dog owners to sign the pledge. The pledge is likely engaging responsible pet owners but does not appeal to dog owners that do not pick up their pet’s

waste. Further, there appears to be a lack of follow-up with pet owners to track and report this voluntary commitment and, or acknowledge the City's appreciation for their pledge.

Pet Waste Video

A second test panel of dog owners viewed two pet waste videos. The City of Frederick produced a pet waste video, however, the video was published during the project and was not available for testing as part of this effort (<https://www.facebook.com/video.php?v=949095291790653&fref=nf>). Test panel participants were divided on the humorous approach, but the majority agreed that the message was clear and there was preference for a shorter video.

RECOMMENDATIONS

The recommendations to improve the City's pet waste program are based on the following positioning statement, or what the City of Frederick wants to achieve as a result of program implementation:

We want all dog owners to license their pets and to pick up pet waste and dispose of it properly to keep the City of Frederick and backyards clean.

An initial review of recommendations by the City found that a voluntary, incentive-based program would be more desirable and acceptable by decision-makers than a regulatory or enforcement approach. While, a regulatory approach may likely be the most successful approach for the 'make-me' population to adopt the desired behavior, it would not appeal to the City as a cost-effective approach (i.e., use of law enforcement personnel). The make-me population is likely a small part of the population admitting not to pick up pet waste based on the survey. However, the Center and WWTW suggest that the make-me group may also be a part of a larger part of the pet owner population that does not license their dog with the Frederick County. Therefore, an alternative approach to incentivize this population was pursued, that would also include pet owners with unlicensed dogs.

Initially, downtown Frederick was viewed by the City as the pet waste problem area and there was a need to keep it clean of pet waste given its marketing as a tourist destination. While the survey respondents identified the downtown as a problem area for pet waste, parks and sidewalks throughout the City are seen as additional hotspots for pet waste; this also includes the downtown dog park – Baker Park. Based on the results of the current study, a more effective pet waste program would use incentives, targeted messaging and other types of assistance for the broader population of City dog owners to adopt the desired behavior.

Given the positioning statement, the recommended plan for implementation would address two segments of the population and would be implemented in two separated phases.

The first phase of project implementation is to engage homeowners with yards to pick up pet waste in public areas and in their yards and to develop a baseline metric of pet waste for the City. The second phase of implementation is to target unlicensed dog owners through a dog licensing amnesty program offered annually through the County to City of Frederick residents. The phased approach to

implementation is based on the ability to readily implement the first phase in order to address an immediate need to increase pet waste pick-up throughout the City. The second phase requires additional time to coordinate efforts between the City and Frederick County Animal Control to pursue options for an amnesty program, as this is a fee-based and regulatory program.

Phase 1: Clean Yards/Streets Challenge

The first phase of the project is to develop a “Clean Yards/Streets Challenge” that is a friendly competition amongst the City’s neighborhoods to draw awareness to the amount of pet waste generated and to increase the number of pledges signed by residents to pick up after their pets. The City of Frederick has twelve (12) Neighborhood Advisory Councils that would be the target audience for this plan. The purpose of the “Clean Yards/Streets Challenge” is to target dog owners with yards. A kick-off event would be organized to register dog owners using an updated City of Frederick Pet Waste Pledge describing the importance of picking up waste *anywhere*- in yards, as well as public areas. The event would provide other pet-friendly activities and information featuring a newly created messaging campaign. The winning neighborhood would be selected based on the number of pet waste pledges signed and pounds of pet waste collected during the challenge period (e.g., two weeks). The pet waste collected at designated pet waste locations would be weighed at the end of the challenge period. While the behavior during the challenge would focus on pet waste pick-up in public areas, the messaging developed for the campaign would also focus on picking up pet waste anywhere your dog poops including backyards.

The results of the plan would have multiple benefits to include: increased awareness of an updated City of Frederick Pet Waste Pledge, additional pet owners taking the pledge, and development of a baseline of pounds of pet waste generated by dogs. The winner of the “Clean Yards/Streets Challenge” would include prizes such as pet waste station(s) installed in their neighborhood, and, or a drawing for a discounted or free pet waste pick-up service (e.g., Doody Calls) for each resident who signed the pledge entered. There may be opportunities for downtown businesses or other businesses to sponsor the “Clean Yards/Streets Challenge” giveaways and prizes. The pounds of pet waste collected would provide a baseline statistic to inform the broader dog-owner population of Frederick of how much pet waste is produced and left behind when it is not picked up and disposed of properly.

A promotional message developed for print and social media campaigns would reinforce the desired behavior, along with advertising the event and its winners. This challenge could be repeated annually.

Phase 2: Dog License Amnesty Program

The second phase of the project is to target dog owners who have not registered or licensed their dogs. The amnesty program would have a reduced or fee-waiver for dog registration and licensing. Other elements of the program may include rabies vaccinations on-site as it is a pre-requisite to register the dogs. The reasoning behind targeting this population is based on survey findings that responsible dog

owners who register their pets are more likely to adopt responsible behaviors, such as picking up their pet waste and disposing of it properly. When pet owners seek a license, this provides an opportunity for county officials to remind them of their legal obligation to remove pet waste from public areas and to urge them to remove it from their own yards, as well. The amnesty program would be an annual event and coincide with a public event in the City such as the Dogs Days of Summer, a street festival in Downtown Frederick promoting its dog-friendly policy and downtown area. Similar to the Clean Yard Challenge, dog-owners would be asked to sign the Pet Waste Pledge Form. The Downtown Business Partnership would be approached to help sponsor and promote this event.

EVALUATION

The recommendations provide an opportunity for the City to develop a baseline of the pet waste problem in the City of Frederick and track the effectiveness of their pet waste program. Three direct metrics to evaluate the program include: 1) the amount of pet waste collected and weighed through the Clean Yards Challenge, 2) the number of Scoop the Poop pledges signed, and 3) the number of dogs licensed through the Amnesty program. Table 1 provides a list of example metrics to measure the effectiveness of the program.

The information from the program evaluation would provide the City with an ability to estimate the nutrient load reduction from pet waste pick-up. Conversion factors for nutrients (e.g. , nitrogen and phosphorus) would be applied to the total weight of pet waste collected. The amount of pet waste collected at the pet waste stations would be used to quantify these loads. Initially, the tracking would be limited to the neighborhoods participating in the “Clean Yards Challenge” but may be expanded as additional neighborhoods join the challenge in future years.

The evaluation of the plan would also include an annual survey of residents and a visual survey of known pet waste areas. Currently, the City is in the process of approving an annual survey of residents, where information about pet waste pick-up behaviors could be added. Further, the City’s visual survey of trail use in and around Baker Park could readily include information about pet waste problem areas. The advertising and media impressions of the media campaign may be assessed through this survey.

Table 1. Metrics to Evaluate City of Frederick Pet Waste Program

INPUTS	OUTPUTS	OUTCOMES	IMPACT	RETURN ON INVESTMENT
<i>Resources allocated to the campaign or program effort:</i>	<i>Program activities conducted to influence a desired behavior. These measures do not indicate whether the</i>	<i>Audience response to outputs including:</i> ● Increase in the	<i>Indicators that show levels of impact on the social issue that was the focus for the effort:</i>	<i>Economic and/or environmental value of changes in behavior and the calculated rate of return on the</i>

<ul style="list-style-type: none"> ● Development of campaign message for Clean Yard Challenge & Amnesty Campaign ● Update pet waste pledge ● Staff time ● Cost incurred as part of fee reduction for license(by County) 	<p><i>audience "noticed" or responded to these activities. They only represent what was "put out there" including:</i></p> <ul style="list-style-type: none"> ● Number of materials disseminated ● Number of pet waste stations installed ● Media audience estimates ● Number of online ads clicked on ● Number of links clicked on ● Website Traffic ● Online ad system reports 	<p>amount of pet waste collected</p> <ul style="list-style-type: none"> ● Reduced number of pet waste hotspots identified ● Increase the number of Scoop the Poop pledge forms signed ● Reduce number of complaints about pet waste reported ● Number of dog licensed during amnesty 	<ul style="list-style-type: none"> ● Amount of pet waste and nutrients removed from City streets and private yards. ● Incidence of pet waste observed in downtown streets/trails ● Water quality improved (inferred vs direct measurement) ● Increased satisfaction of visitors to downtown ● Reduced public health risk from bacteria 	<p><i>spending associated with the effort:</i></p> <ul style="list-style-type: none"> ● Cost per pound of pollutant reduced, compared to cost per pound of using structural BMPs
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PROJECT IMPLEMENTATION

The project funded by CBT grant provides the basis to develop and evaluate a renewed pet waste program in the City of Frederick, MD. The next phase of the project will focus on the development of a pilot program to test the communications (e.g. messaging content and media forums) prior to implementing the recommendations at a broader-scale for the “Clean Yards/Street Challenge” and further investigate the potential to implement a “Dog License Amnesty Program”. The amnesty program requires coordination with the Frederick County as a project partner and therefore further input from them is needed to determine the implementation potential of these recommendations. Following implementation, the evaluation plan would provide metrics to track and report the effectiveness of the pet waste program. A description of the proposed project implementation phase of the project is provided below with an estimated budget. The budget does not include the cost for the production of marketing materials, web design etc. and is a general estimate based on the tasks outlined in the budget. The total cost of project implementation is estimated at a minimum of \$28,800 as the final project costs will depend upon the dedicated resources and staff from the City of Frederick, local donations or sponsorships, grant funding available and roles and responsibilities taken on by any contractor.

Task 1 Pilot Program

Budget: \$7,800

A pilot program will be developed to test a small portion of the target audiences for “Clean Yards/Streets Challenge”. The pilot program will provide feedback to inform and modify, as needed the overall program prior to broad-scale implementation.

Key tasks for the pilot program include:

- Meetings with the City of Frederick Planning Department, other city departments and key partners, stakeholders and potential sponsors (i.e., Downtown businesses, NACs) will be scheduled to identify the test neighborhood, coordinate activities and review draft and final materials.
- Identify most applicable geographic scope for project implementations (yards, streets)
- A test panel of City of Frederick pet owners will provide feedback on messaging campaigns and visuals to marketing materials.
- Test methods for self-reporting and collection of pet waste bags over a 2-week period in the selected neighborhood and review metrics for tracking and reporting based on results
- Modify recommendations for program implementation

Materials to develop for the pilot program include:

- Develop and test a revised online Poop the Scoop pledge form.
- Clean Yards/Streets Challenge messaging/tag line and production of associated marketing campaign materials

Task 2 Implementation of “Clean Yards/Streets Challenge”

Budget: \$10,500

The implementation of the full-scale “Clean Yards/Streets Challenge” will follow recommendations from the pilot program.

The City of Frederick with its project partners (to be determined) will kick-off the “Clean Yards/Streets Challenge” and identify the neighborhoods (i.e., NACS) that will participate in this initial event. The kick-off event to begin the challenge will include an opportunity for pet owners to sign the revised City of Frederick Pet Waste Pledge. The Challenge will occur over a designated period of time, for example two weeks. The logistics of methods to collect information on the pet waste disposed will be determined during the pilot program. Example methods include: self-reporting by pet owners with specifically developed forms to record information, distribution of pet waste stations in locations throughout the neighborhood that are regularly weighed or pet waste bags counted by staff, daily spot checks for pet waste hotspots, etc. The winning neighborhood of the “Clean Yards/Streets Challenge” would include prizes such as pet waste station(s) installed in their neighborhood, and, or a drawing for a discounted or free pet waste pick-up service (e.g., Doody Calls) for each resident who signed the pledge entered .

Task 3 Evaluation

Budget: \$4,000

The “Clean Yards Challenge” will enable the City to track and report a baseline of pounds of pet waste generated by dogs and determine the relative amount of pet waste picked-up and properly disposed of. The number of pet waste pledges signed will allow the City to track increased awareness of the pet

waste program and desired behavior (pick-up pet waste and properly disposed of it). Additional metrics to evaluate the program may include tracking 'hits' on the City website describing the Clean Yards Challenge and online sign-ups for the pet waste pledge.

Task4 Dog License Amnesty Program

Budget: \$6,500

The purpose of this task is to develop recommendations to implement a "Dog License Amnesty Program". The "Dog License Amnesty Program" requires consultation and discussion between the City of Frederick and Frederick County, MD to identify issues, financial implications for project implementation and expected outcomes. The initial proposal is to provide a waiver for the license fee to register their dog(s) and reduced or free vaccinations. The waiver would result in a loss revenue source for the County, unless provided through other external sources. Further, pet owners also require their dog(s) to show proof of vaccination. Vaccinations may be a financial and, or knowledge barrier for pet owners to license their dogs. Further work to identify how these needs may be met through the proposed amnesty program is needed. It is expected that coordination between the City, County and other partners would occur over a 1-year period with recommendations to implement a proposed program. Funding to implement the program would be pursued once the appropriate approval by City and County officials is provided.