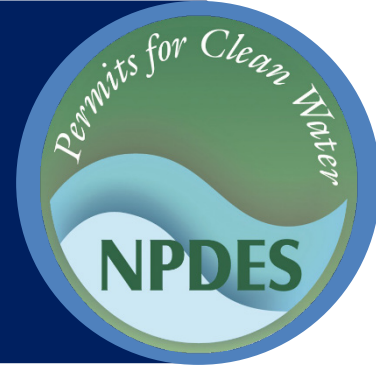




# Stormwater Best Management Practice

## Litter Management



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

### Description

In many communities, litter has become a significant pollutant. Improper disposal on land can cause trash to wash into waterways, where large amounts of it can concentrate in small areas. Trash can become litter when it falls out of improperly secured bins, blows out of garbage trucks, or accumulates at an illegal dump site. Litter on streets and sidewalks and floating trash mar the aesthetics of a landscape and pose threats to wildlife and human health (e.g., choking hazards for wildlife, bacterial infection for humans). Litter can also clog storm sewer pipes, which can damage infrastructure and disrupt operations. Plastic litter can also break down into microplastics, which are challenging to remove from the environment and can be potentially toxic when consumed by wildlife. Municipalities can tackle trash management issues in various ways. Community outreach and education programs are an effective way to reduce litter and engage residents in being part of the solution. This fact sheet presents approaches that municipalities can use to educate their residents and promote responsible litter management.

### Understand Community Knowledge Gaps and Current Practices

To develop a successful litter reduction outreach strategy, a municipality needs to understand the community's baseline of knowledge on the topic. Community members may not know the impact of trash and debris pollution or how litter can end up in waterways. Municipalities can assess knowledge gaps through community surveys, focus groups, or analyses of complaint calls about litter to municipal departments (see [Soliciting Public Opinion](#) fact sheet).

Municipalities can also work to understand current trash disposal practices in their communities. Are enough trash, recycling and cigarette butt receptacles available in public places? Are there issues with public trash collection? Are residents aware of existing litter laws? By analyzing current habits and practices, municipalities can formulate the right messages and programs to

effectively educate residents about litter management and remove barriers for participation.



When not properly managed, trash can accumulate in storm drains where it can clog the systems and discharge into local waterways.

### Determine a Program Approach

After a municipality has identified its residents' knowledge gaps and current practices, it can draft a program that educates community members on proper trash disposal and litter management practices. The program can cover the different ways to prevent litter from polluting the community and waterways. It may have many elements, such as educational campaigns and resources, incentives for reducing waste, or cleanup programs. When determining a program approach, municipalities can also reference EPA's [Trash Free Waters](#) program, which highlights trash management projects and provides best management practices tools and resources for planning and implementing a trash disposal and litter prevention program.

### Education Campaigns and Resources

An education campaign can inform residents of the consequences of littering and provide them with options for proper recycling and waste disposal. It can also reiterate the benefits of keeping a community litter free.

A municipality can convey such messages in flyers, door hangers, magnets and bumper stickers. It can distribute these materials online through the mail, at public places (e.g., libraries, town halls), in schools, and at local businesses. For example, the City of Surprise, Arizona, launched the “Keep It Beautiful, Surprise!” campaign to show residents how they can prevent litter around the city through creative videos and social media graphics. Trash Free Waters partnered with the District of Columbia to implement the [Curbside Disposal Education Campaign Pilot](#) to educate residents on proper trash containment and to encourage behavioral changes. The District’s Department of Public Works distributed campaign stickers that illustrated four simple actions to decrease accidental waste leakage to 8,000 single-family homes in the city.



A social media graphic created for the City of Surprise, Arizona “Keep It Beautiful, Surprise!” anti-litter campaign.

Photo Credit: City of Surprise, Arizona

Municipalities can also use online resources to promote existing solid waste disposal services that residents can use for proper trash and debris disposal. For instance, the City of San Francisco, California, expanded its [residential and commercial collections program](#) to include separate bins, offered in a full range of size and pickup frequency options, for mixed recyclables, compostables and trash. The city posted outreach materials in various languages to promote the program and explain what goes in each bin. Many municipalities have also created educational materials about disposal methods for various types of solid waste, yard waste and hazardous waste.

## Cleanup Events and Programs

To engage residents and involve them directly in keeping their community clean, municipalities can [organize volunteer cleanups](#). Municipalities can organize these cleanup events themselves or provide the tools for community organizations to conduct their own cleanups. For example the North Carolina Department of Transportation organizes a [biannual roadside litter pickup campaign](#) to clean up the state’s roadways. The department provides volunteers with cleanup supplies, visibility vests and gloves.

By using a hands-on approach such as a cleanup event, community members will see the direct impact improper trash and debris disposal has on a community and the environment, compelling them to adopt proper trash and debris disposal practices. Residents can sign up for volunteer shifts to help pick up and properly dispose of litter. Municipalities can track what the community collects during cleanup events to quantify and target sources of trash to improve reduction of litter at the source.

## Improved Infrastructure

Many municipalities also work to address litter issues by improving trash infrastructure for residents. For example, they might change the locations, number and size of trash receptacles, recycling bins and cigarette butt receptacles based on expected needs. Some municipalities focus on specific types of litter—such as cigarette butts, which are small but very common. Organizations dedicated to removing litter from the environment will often provide trash receptacles free of charge. For instance, [Keep Virginia Beautiful](#) offers [free cigarette butt receptacles](#) obtained through grant funds to businesses and municipalities that request them. Municipalities can also request pocket ashtrays and ashtrays that fit in vehicle cup holders for distribution at community events.

Municipalities can include information on their website informing residents how to apply for permits to install public trash cans or how to request that the public works department install more trash cans in neighborhoods where public trash receptacles may be lacking. They can also provide information on how to report a trash receptacle maintenance issue, such as trash cans that are overflowing and causing litter in the surrounding

area. For example, San Francisco, California’s Better Streets initiative has a [webpage dedicated to sidewalk trashcans](#) with this information.

### Laws and Ordinances

Enacting an ordinance or law may help a municipality signal the importance of proper trash management to unmotivated residents. The municipality can establish regulations that require proper disposal of trash and debris to discourage littering. To enforce regulations, they can issue fines and community service hours for any noncompliance (e.g., failing to properly store trash for collection, throwing household trash in public trash bins, littering).

### Evaluate Program Effectiveness

Municipalities can measure the effectiveness of litter management education campaigns in many ways:

- Conduct before-and-after surveys or schedule focus groups to measure whether attitudes and behaviors toward litter management have changed.
- Monitor the nature and number of complaint calls relating to litter in the community.
- Weigh the amount of trash removed from capture structures or collected during stream or roadside cleanup events over a period of time a campaign is active

If the results of these evaluations do not show improvement, municipalities can reassess knowledge gaps and barriers to participation and adjust their outreach and programs as needed.

#### 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

#### 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.*