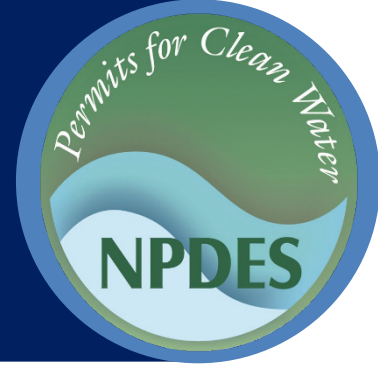




# Stormwater Best Management Practice

## Educating Residents on Safely Discharging Chemically Treated Water



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

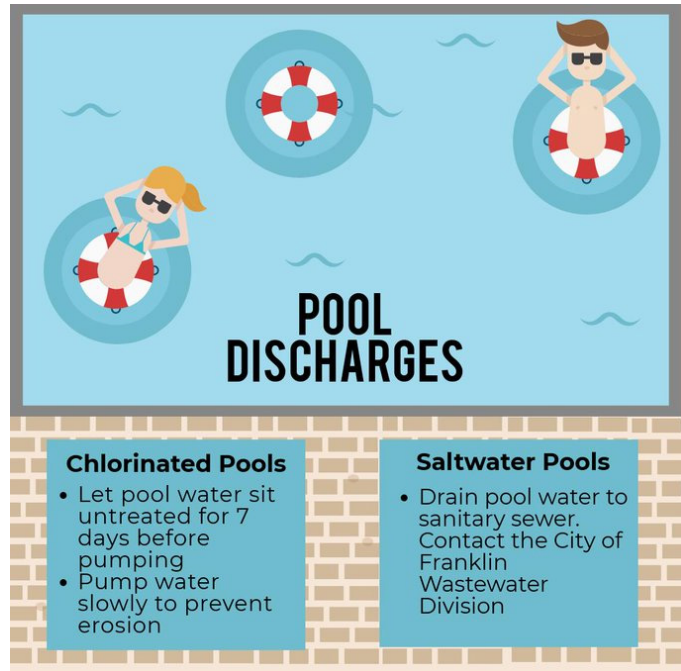
### Description

When it enters surface waters, water treated with chemicals such as chlorine, bromine and salt harms local water quality and is toxic to wildlife and fish. Pools, hot tubs and fountains often use chemically treated water; however, most of the chemically treated water discharged into storm sewer systems—and ultimately water bodies—is from residential swimming pools. Many pool owners who live in cooler climates drain their swimming pools before winter to reduce maintenance and potential damage from freezing. A municipality with a municipal separate storm sewer system (MS4) can protect nearby surface waters from illicit discharges by educating residents about appropriate discharge practices. Instead of discharging chemically treated water to the storm sewer system or directly into local waterways, individuals should follow alternative discharge options, such as:

- Draining to a sanitary sewer
- Dechlorinating water and then discharging to storm sewers
- Dechlorinating water and using it for irrigation

### Understand Community Knowledge Gaps and Current Practices

To launch an effective water discharge education program, a municipality can first determine the community's current behaviors and baseline of knowledge on the topic. With this understanding, it can formulate the most effective messages and educational programs; it can also compare behaviors and knowledge before and after the education program to gauge effectiveness. Some pool and hot tub owners may not realize that water treated with chemicals pollutes waterways and harms wildlife when discharged incorrectly. Some community members may not know that their municipality regulates the discharge of water from pools, hot tubs and fountains. Municipalities can gather information about residents' knowledge gaps and current practices via surveys, focus groups or



The City of Franklin, Tennessee, posted this graphic on Twitter to educate residents on what to do before discharging pool water.

Photo Credit: Ellen Moore, City of Franklin, Tennessee

community meetings. See the [Soliciting Public Opinion](#) fact sheet for more information on how to effectively gather this information from community members.

### Determine a Program Approach

After identifying residents' knowledge gaps and current practices, a municipality can craft its water discharge management program. The program should aim to educate residents on the different options for eliminating chemically treated water in storm drains. Because chlorinated pools contribute the most chemically treated water, municipalities may choose to focus on discharge from pools—but they should also make information available on discharging from other fixtures such as hot tubs, spas and fountains. An education program may have many elements such as implementing laws and ordinances, distributing educational materials, or creating digital content. It will be important to remember

that local codes and ordinances can vary by location and to make sure their messaging aligns with these requirements.

### Implement Laws and Ordinances

Enacting or updating an ordinance or law may incentivize residents to change their chemically treated water disposal practices. Many communities have laws or ordinances that either directly prohibit certain discharges, including chlorinated pool and hot tub water discharge, or outline the types of water that are and are not permissible in sewer systems. For example, Oklahoma City, Oklahoma, [directly bans](#) the discharge of chlorinated water into the MS4 and local and state waterways in its Code of Ordinances. Virginia Beach, Virginia, implemented an [ordinance prohibiting the discharge of private swimming pool water](#) into the public sewer system. Some of these laws also include fines that may increase for each reoccurring offense, [such as in the District of Columbia](#).

For more examples of laws and ordinances addressing chlorinated water discharge, see the following:

- [City of Bothell, Washington](#)
- [City of Los Angeles, California](#)
- [City of Phoenix, Arizona](#)

### Post and Distribute Educational Materials

Municipalities can address knowledge gaps and encourage behavior changes by posting and distributing educational materials. They can post information on municipal websites, hang signs throughout the community, hand out flyers and brochures, or mail flyers along with other important information (like water bills) that people are likely to open and read. The Kirkland (Washington) Public Works Department developed a [flyer](#) that explains treated pool water discharge methods and provides tips for properly disposing of pool and hot tub water. The Clark County Clean Water Division in Washington created a [two-page flyer](#) that outlines how “clean water begins at home.” Brochures, such as Glendale, Arizona’s [“How to Drain or Backwash Your Pool, Spa, or Fountain,”](#) are also useful; municipalities can publish them online, post them to social media accounts, or print and hand or mail them out. Some municipalities or states may require a permit for the installation of a swimming pool and can distribute

materials on the proper disposal of treated water when a permit for a new pool is issued. These examples illustrate ways to convey information in simple terms while emphasizing the need to discharge water treated with chemicals according to a municipality’s guidelines.

If municipalities cannot create their own educational materials or are not sure where to start, they can see if surrounding cities or state agencies have materials they can use or adapt. For example, the Pennsylvania Department of Environmental Protection drafted a [swimming pool discharge and disposal fact sheet](#) that explains how chlorinated water or water treated with other chemicals pollutes the environment and how residents can correctly discharge pool, hot tub or spa water. The department also released [an article](#) with reminders and tips for proper pool and hot tub water disposal. Because these materials contain universal advice on chemically treated water discharge in Pennsylvania, municipalities in the state can share them with their residents or use them as a guide in generating new materials.

Municipalities can also look for partnerships with hardware stores or pool suppliers to help distribute their educational materials. Municipalities can leave flyers or brochures at local hardware stores for customers to read and take home. Many pool suppliers have online blogs that could share a municipality’s educational materials so customers can learn how to properly manage chlorinated water discharge as they shop for a pool or spa.

### Use Social Media or Digital Content

If educational materials like flyers and brochures are not making an impact, social media and digital content can be a useful way to help reach residents more personally and casually. Many municipalities use their websites to educate residents on proper chemically treated water discharge methods. For example, the City of Sierra Vista in Arizona has an [easy-to-read website](#) explaining the legal ways to dispose of pool water. For more examples of how municipalities include proper discharge information on their websites, see below.

- [Fairfax County, Virginia](#)
- [City of Mesa, Arizona](#)
- [Palmer Township, Pennsylvania](#)

Some municipalities are using videos, podcasts and social media to reach a wide audience with simple, concise messaging. Cobb County, Georgia, promoted safe ways to discharge pool water during an episode of Cobb County Water System’s monthly podcast. Municipalities are beginning to use social media platforms to post short tips or infographics on how to properly discharge pool and hot tub water. Some even link to their complaint forms so residents can submit instances of improper discharge.

For examples of social media posts, see the following:

- City of Franklin, Tennessee, tweet summarizing how to drain chlorinated and saltwater pools
- West Maui Kumuwai, Hawaii, tweet with a link to Maui’s stormwater violation complaint form
- Upper Uwchlan, Pennsylvania, tweet with a link to the Pennsylvania Department of Environmental Protection’s swimming pool discharge fact sheet

- Town of Collierville, Tennessee, tweet informing citizens that pool water pollutes waterways

## Evaluate Program Effectiveness

Municipalities should continuously evaluate chemically treated water discharge education programs for effectiveness and redesign them if necessary. A municipality can evaluate its program’s effectiveness in several ways. 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 about chemically treated water discharge to understand public opinion on the topic. Furthermore, a municipality can complete a “before and after” analysis of the amount of chemicals such as chlorine and bromine found in local waterways to see if levels have decreased after the education program. If the results of these evaluations do not show improvement, municipalities should reassess their communities’ knowledge and adjust their educational 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

### 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.*