

What's Going On In Our Corner?

Northeast Wisconsin MS4 Permittees



The MS4 Permit Standard

MS4 permit conditions are developed to meet the MS4 permit standard: reduce pollutants to the maximum extent practicable (MEP), protect local water quality and meet CWA standards. MS4 permittees satisfy the MS4 permit standard by complying with their permit and successfully implementing the stormwater management programs.

Stormwater quality is impacted by various urban activities. While many of these activities occur in every community, the extent of these activities and the practices needed to mitigate impacts from these activities varies.

Additionally, although practices used to mitigate stormwater pollutants may be the same throughout communities, implementation can vary, affecting effectiveness. For example, Community A and Community B experience similar volumes of traffic and, therefore, pollutants. Although both communities implement the same street sweeping practices (e.g., equipment, frequency and timing), Community A allows cars to park on the street while Community B does not. Community A may not be able to sweep the curb line, making its street-sweeping efforts less effective. Consequently, to reduce pollutants to the MEP, Community A may have to implement additional practices.



Photo Credit: City of Appleton

City Of Appleton Hosts Successful Alderperson Native Planting Management Tour

Educating elected officials about stormwater management is crucial for effective MS4 administration. Stormwater topics often go underappreciated by residents and elected officials, simply because they aren't aware of everything that goes into a successful stormwater program. Recently, the City of Appleton took a proactive step by organizing a tour for their alderpersons.

On July 17, staff from the city's Department of Public Works, along with staff from NES Ecological Services, led alderpersons on a guided tour of one of Appleton's municipal wet detention ponds. During the "Alderperson Native Planting Management Tour," participants learned about where stormwater comes from, how it collects and carries pollutants, and where that polluted runoff ends up. The education highlighted how ponds function, the important design components and the significant role of stormwater ponds in improving water quality and flood control.

The tour emphasized the importance of an effective native vegetation planting management program.

Native vegetation acts as a natural sponge, absorbing and retaining water, preventing soil erosion, and taking up pollutants such as nitrogen and phosphorus before they reach natural water bodies. Additionally, they stressed the need for proper maintenance and support of these native plants, specifically how to encourage healthy native plant growth and manage invasive plants without relying extensively on herbicides. In doing so, their stormwater management efforts are not only more sustainable but more effectively managed.

The tour provided a hands-on educational initiative, effective in bridging the gap among policymakers, which can lead to better-informed decisions and policies. By educating elected officials, the City of Appleton is laying the groundwork for more informed policy decisions regarding stormwater management. Elected officials who understand the importance of stormwater infrastructure are more likely to support funding, maintenance and innovative solutions. This active delivery mechanism also helps satisfy one of the MS4 permit Public Education and Outreach requirements.

Topics

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Of The MS4 Permit Standard

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Algae Education

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And Events

Illicit Discharge Detection And Elimination: Dry Weather Outfall Screenings

Dry Weather Outfall Screenings? Dry weather stormwater outfall screenings remain an effective way to identify illicit discharges or connections. Since flow should not be present during dry weather, determining the source of flow is critical to determine if the flow is illicit. Typically, “dry weather” is 48-72 hours after a rain event. However, based on the precipitation event and size of the drainage area, this time may vary.

What is considered flow? Often, it’s obvious if flow is present. However, sometimes flow is more difficult to determine. Overall, if flow is questionable, investigate upstream of the stormwater outfall to determine if flow is present. If so, test the flow at that upstream location for pollutant parameters required by your MS4 permit.



Outfalls located within a low area allow stormwater to pool.

Consequently, standing stormwater may be mistaken for flow. If standing stormwater is present, investigate upstream of the outfall. If flow is present upstream, test the flow at this upstream location.

It may be difficult or impossible to determine flow at outfalls that are fully or partially submerged by receiving waters or located within enclosed waterways. Like the example above, investigation must occur upstream of the outfall to determine flow.

In areas with high groundwater, flow may be questionable. To avoid testing groundwater, screenings should be avoided during times of high groundwater, such as early spring. However, as with the examples above, investigation should occur upstream of the outfall to determine flow.

Image of standing water at outfall during dry weather.
Photo Credit: Wisconsin DNR

Northeast Wisconsin Stormwater Consortium: Summer Is A Great Time For Algae Education

It’s summer in Northeast Wisconsin, many prairie flowers are blooming and those fortunate enough find themselves near prairie plantings may notice the sweet smell of nectar in the air. Summer also brings blooms of a different type. Algae blooms are a common occurrence in both stormwater ponds and our natural waterways. A common misconception is that the presence of algae indicates an unhealthy pond, however, the presence of algae is nature’s way of responding to nutrient loads washing into waterways.

Educating the public can go a long way in helping reduce the nutrient loads to water bodies. Short-term fixes, like physical removal or chemical treatment, can help with algae issues, but the issue will continue unless the issues with nutrient loading in runoff are addressed. Therefore, it’s a great time of year to distribute educational information on decreasing the use of fertilizers, sweeping fertilizer off impervious surfaces before it runs off, proper grass clipping and leaf management and picking up pet waste. The [Northeast Wisconsin Stormwater Consortium \(NEWSC\)](#) member resources page contains several related documents that members use as passive educational mechanisms.

Aside from the nuisance of green water and the odor, certain types of algae can release toxins that are harmful to people and pets. Learn about blue-green algae or [report a bloom](#).

Major, Minor And Priority Outfalls

Major and minor outfalls are based on pipe or drainage area size. For an outfall to be considered major, it must meet one of the criteria listed in [s. NR 216.002\(16\)](#). Outfalls that do not meet these criteria are considered minor.

Since major outfalls serve large drainage areas, the likelihood of illicit discharges looks greater.

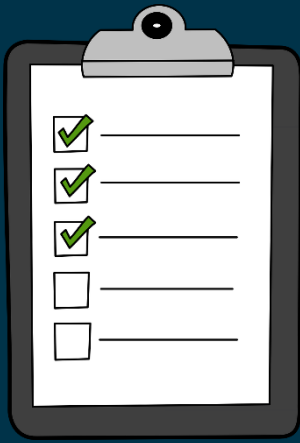
As such, MS4 permits continue to require screening major outfalls.

However, results have shown screenings should not solely be based on size. Consequently, MS4 permits have included screening requirements for minor and priority outfalls.

Though a priority outfall may fit the definition of a major outfall, priority outfalls should be based on illicit discharge potential in the contributing drainage.

Characteristics that should be considered include history of known/suspected illicit discharges, sections of storm and/or sanitary sewer that have exceeded/approaching their design life, contributing drainage areas with 80%+ imperviousness, business with frequent changes in property ownership or operations, etc.

Lastly, although the MS4 permittee determines its own priority outfalls, MS4 outfalls should routinely re-evaluated.



Want To Be Featured In The MS4 Fall Edition?

We want to hear about your municipality's success stories and practical procedures.

Please reach out to the Wisconsin DNR stormwater engineer with stories to include in upcoming editions:

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Upcoming Dates, Reminders And Events

Save The Date! Wisconsin Stormwater Week Is Back, Sept. 21-29, 2024

Stormwater Week is an awareness campaign that aims to inform, educate and engage Wisconsin residents on the topic of stormwater pollution prevention through shared, consistent messaging. Each weekday of Wisconsin Stormwater Week focuses on different aspects of stormwater pollution prevention. [Find useful content such as webinars, social media posts and more.](#)

Get Tips On Dealing With Certain Invasive Plants

A quick primer on four common invasives, how to recognize them on the landscape and how to handle them when you do. For details on these and the 100-plus other terrestrial plants listed as invasive under Wisc. Admin. Code NR 40, check the [Invasive Species Master Resource Table](#). Or read [the article](#).

Storm Water Permit Viewer

Need to see what active construction sites with DNR permits are within your community? Or maybe you are curious to see where permitted stormwater industrial facilities are located? The [Storm Water Permit Viewer](#) provides an interactive map to explore active WPDES Stormwater Permits and much more. Select "Show Layers" in the top left corner to select different layers.

Great Lakes Basin River Water-Quality Trends

[This dashboard](#) summarizes water quality information for tributaries of the Great Lakes in the United States. Nitrogen, phosphorus and sediment concentrations are measured monthly 24 rivers that flow into the Great Lakes.

2024 Surface Water Grant Applicant Guide And Program Guidance Now Available Online

The 2024 Surface Water Grant applicant guide and program guidance documents are now available for review on the DNR's [Surface Water Grants webpage](#). Additionally, a NEW [recorded introductory webinar for new applicants](#) is available on the Surface Water Grants webpage. Pre-applications are due Sept. 15, 2024.