Quarterly–
Fall Edition

November
2023

What's Going On In Our Corner?
Southeast WI MS4 Permittees

Photo credit: Jesse Bennett, WDNR
Artwork by Maggie Kornowski

Topics

Does your municipality street sweep after leaf collection?

It's that time of year again as residents begin to rake their fallen leaves and stage them for pick up by their local municipality. We all know how fragile fallen leaves can be – breaking into tiny pieces as we rake them into a pile. Because of this, these broken pieces of leaves may remain after leaf collection and could runoff into nearby stormwater drains.

So, what's the big deal with leaving these broken pieces on the road? The big pieces were collected anyways.

Broken pieces of leaves have the potential to enter waterways and can release three times the amount of phosphorus (Cowen and Lee 1973) than a leaf intact would! Street sweeping after a leaf collection operation is an effective best management practice to collect the broken pieces and prevent large amounts of phosphorus entering nearby waterways.


Photo credit: CTV News

An Artistic Approach To Storm Drain Stenciling: The City Of Port Washington

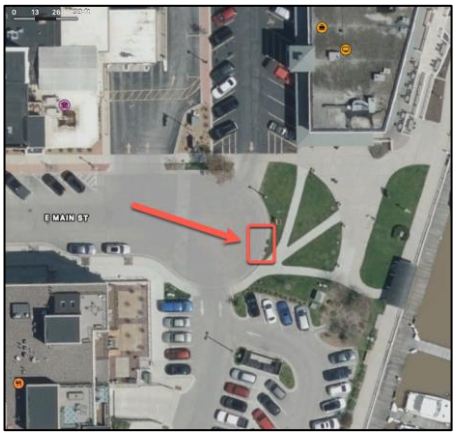
Ozaukee County Watershed Coalition (OCWC) partnered with the City of Port Washington for a unique take on stormwater drain stenciling by turning it into an art mural project. This project not only provides engaging art for the public to admire, but also captivates viewers on the importance of water quality to those who may be unfamiliar with where stormwater drains go – something that traditional stormwater drain stenciling may not be able to accomplish due to the smaller scale and lack of visuals.

To kickstart the project, OCWC and the city opened the floor for local artists to submit their work. This exciting project began with sending out a message for artists to submit their proposal. In spring 2023, a panel of judges, including volunteers, elected leader and city staff, selected Maggie Kornowski, from West Bend to paint the stormwater drain mural.

The storm drain mural was completed in summer 2023 and can be found at the east end of E. Main Street in downtown Port Washington. Rob Vanden Noven, the city's Director or Public Works, explained that the mural is in a highly visible location, adjacent to a newly created pedestrian plaza where the city's Harborwalk, marina, downtown and the Ozaukee County Interurban Trail all intersect.

In an Ozaukee Press article, OCWC explained that they hope to conduct more storm drain mural work in the city like Kornowski's in the future to better educate the public on stormwater runoff and the importance of water quality.

OCWC and the city have taken traditional storm drain stenciling that has been done for years and turned it into a focal point for those to enjoy and learn in downtown Port Washington.



The storm drain mural can be found at the East end of E. Main St in downtown Port Washington. Near Heart of the Harbor.

Let's Talk About Measurable Goals

The MS4 permit sets the minimum expectations to reduce stormwater pollutants but to reduce pollutants to the Maximum Extent Practicable (MEP), one must use adaptive learning! Simply put, adaptive learning is evaluating current practices and looking for improvements. Once improvements are identified, take action to work towards it. However, to know if your actions were successful, it is important to evaluate your results – this is where measurable goals come in. Measurable goals should include metrics (qualitative or quantitative) so you can monitor progress and make data-driven decisions. To better explain this, here are *some examples of measurable goals:*

- ***Construction Program***
  - Although the Permittee is implementing permit conditions (i.e., conducting site inspections, utilizing enforcement), they are still finding noncompliance issues are not resolved in a timely manner at active construction sites. To better address this issue, they may set a goal to have 50% or more noncompliance sites return to compliance within 24 hours. To achieve this goal, the Permittee may choose to implement a variety of actions such as providing education to construction applicants during plan review, increasing municipally conducted erosion control inspections, utilizing more enforcement, etc.

- ***Post Construction Program***
  - The Permittee identifies a communication gap between two departments when inspecting publicly owned stormwater Best Management Practices (BMPs). Consequently, BMPs are not being inspected or maintained. To ensure all BMPs are inspected and maintained (the goal), the Permittee implements a process such as a shared calendar or quarterly check-ins.

- ***Pollution Prevention***
  - The Permittee does not have a leaf collection service but offers a residential leaf drop-off service at one of their municipal properties. However, residents are not instructed on how to bring leaves onto the property and the Permittee notices loose leaves everywhere. To minimize this, the Permittee may choose to educate residents on ways to properly bring in their leaves (e.g., bring them in bags instead of loose in a truck bed).

After implementing actions, the Permittee should evaluate if their goal was achieved. If so, the Permittee should continue to implement those actions then look for future program improvements. If not, the Permittee should evaluate their actions to better achieve the goal in the future.

Set It And Forget It? No! Plan, Do, Check, Act

After identifying a best management practice (BMP) is needed, a BMP is designed and implemented. Problem solved, right? Unfortunately, there are situations where a BMP is not addressing the need. This could happen for a variety of reasons, some of which are hard to plan for. This is why the concept of 'Plan, Do, Check, Act' is vital when trying to make improvements.

Though inspections determine if a BMP needs maintenance, inspections should also be used to verify the BMP is effective. For example:

- Inspections show a BMP needs constant maintenance. This may indicate the BMP designed is not adequate (e.g., too small) or additional actions/changes are needed for the BMP to be effective (e.g., if the BMP has recently become over inundated with sediment loading, implement practices to limit the recent loading).

- Inspections show the BMP is functioning as designed but, is not completely addressing the concern (e.g., is not capturing all of the intended flow).

Often, the reason for BMP inefficiencies is clear (i.e., If you just removed sediment from a BMP and sediment removal is needed again). However, the reason for ineffectiveness can sometimes be more elusive (i.e., The BMP appears to be functioning appropriately so, why are we having an issue?). When this occurs, additional inspections or investigation is needed. Here is a quick story highlighting a Permittee implementing 'Plan, Do, Check, Act':

At Wisconsin State Fair Park, there is an animal wash station (with floor drains discharging to sanitary) inside of a barn. Since this barn has open walls, the wash area is also slopped so wash water and waste *should* be contained inside the barn and discharge to sanitary. Each day of the fair, BMPs and barns are inspected. During many of these daily inspections, this wash station appeared to be adequate. However, during one inspection, the Permittee noticed liquid outside of the barn (i.e., wash water was pushed up the slope and was not completely discharging to sanitary). As this BMP inefficiency is likely caused by people, the fair plans to replace the slope with a concrete barrier to ensure all flow is directed to the floor drain.

What happens to the leaves after collection?

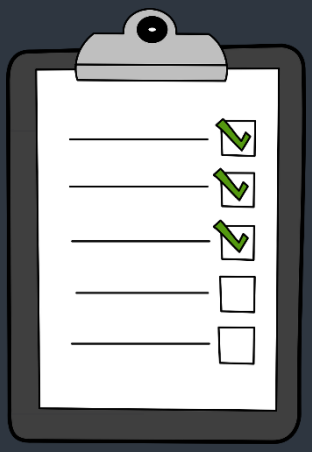
Some municipalities bring leaves to their DPW yard or another municipal property for temporary storage. Materials should be stored in a way that considers the flow path of stormwater to reduce stormwater contamination.

Placement Of The Leaf Storage Pile

Placing the pile on impervious surface where runoff can enter a stormwater drain or into a nearby waterway should be moved. Consider placing the storage pile on pervious surface or areas where vegetation buffers can interrupt the stormwater flow. A canopy or enclosure to limit the leaf pile exposure to wind and rain is also an option.

Have A Plan On How Your Community Will Get Rid Of The Leaf Pile

Composting the pile is an option, however, please visit the department's website to learn more about what can be composted and rules and regulations. If your community decides to compost, ensure that there is a way to get rid of the material, so it does not accumulate over time (e.g., allow residents to pick up material).



For any MS4 permit-related questions, please contact your SE Stormwater Specialists:

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or

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Upcoming Dates, Reminders And Events

NASECA-WI Construction Site Erosion Control and Stormwater Permit Compliance Training: Nov. 28 – 29, 2023 in Pewaukee, WI

- The two-day course is designed for those who perform site management duties, supervise or direct construction activities, install best management practices, and/or inspect sites for compliance relating to erosion/sediment control and stormwater management. For more information please visit Erosion Control Compliance Training – NASECA-WI (nasecawi.org)

Fox Illinois River Basin TMDL Project Update

- On Oct. 31, 2023 the Wisconsin Department of Natural Resources (DNR) hosted a public informational webinar to provide updates on the DNR-led water quality study titled "Total Maximum Daily Loads for Total Phosphorus and Total Suspended Solids in the Fox Illinois River Basin" (FOXIL TMDL). The informational webinar covers updates on the project including a summary of monitoring data collected for the project; an overview of agricultural land use and practices in the study area; a description of subbasin delineation for watershed modeling; and an outline of next steps for the project. The webinar was recorded and is available for viewing through the Fox Illinois River Basin TMDL webpage.

WI Salt Wise: Smart Salting for Parking Lots and Sidewalks Workshop, Nov. 28, 2023

- Learn how using the right amount of salt can save time, budget and our waters. The training will include best management practices to keep paved areas safe, benefits of using a liquid salt system, guidance on how to determine the right amount of salt to use and case studies from local applicators.
- The last hour of the event will be an equipment open house. Training will take place at Madison Metropolitan District (1610 Moorland Road). Sign up can be found on the WI Salt Wise website: wisaltwise.com/Event/Detail/1692

A Free, Useful Tool for Urban Planners, Landscape Architects and Homeowners: The EPA's Stormwater Calculator

- The stormwater calculator can help you balance land developments and landscaping with the right amount of green infrastructure. Visit the stormwater calculator here: National Stormwater Calculator (epa.gov).
- Please note the stormwater calculator only analyzes up to 12-acre sites. If you have any questions regarding the stormwater calculator, please contact swc@epa.gov.

National Stormwater Day – November 16th

- The National Municipal Stormwater Alliance (NMSA) has officially established November 16th as National Stormwater Day in recognition of the day the MS4 program was established (November 16th, 1990). To honor this occasion, NMSA is hosting a free webinar on November 16th and has launched a website dedicated to National Stormwater Day – https://stormwater.day/. This website provides access to media toolkits associated with National Stormwater Day including logos, flyers and short videos associated with National Stormwater Day – all are welcome to use these resources to spread the word!