

Madison Water Ways



News from your Stormwater Utility & Sewer Utility

cityofmadison.com/engineering/stormwater

FALL, 2020

City Engineering Leads Innovative Thinking with Distributed Green Infrastructure Options for Residents

Distributed Green Infrastructure (DGI) is a network of smaller storm water practices throughout an area. The idea is to treat storm water closer to where it falls. "The City is starting to study DGI to determine the benefits for flood mitigation and for water quality improvements," Greg Fries, City of Madison Engineering Division Assistant City Engineer, said. "We are working with the USGS (United States Geological Survey) on a five-year pilot program that will help inform our decisions on DGI and help residents and policy makers understand the numerous benefits along with the costs associated with these options."



Residents in a near west side neighborhood were "digging" a green infrastructure pilot project this summer as part of a larger reconstruction project.

Residents in the study area, in the Westmorland neighborhood, on the City's near west side, embraced a pilot project that was part of a reconstruction project. The City used the road reconstruction project as an opportunity to dig in with green infrastructure, and provide residents more options than the standard raingarden terrace. In this study area, the Engineering Division is working with volunteers to educate, promote and incentivize DGI options such as installing permeable pavement, more rain gardens and green roofs on private property.

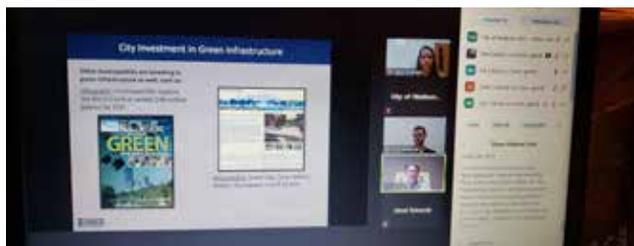
"Friends of Lake Wingra have been a collaborative partner in all of this work. When residents are enthusiastic about new ideas and ways to improve, it's exciting for our division and really beneficial to our community," Fries said. "If anyone has interest in future potential green infrastructure options, and they fit with the projects planned for the year, please reach out to City Engineering."

Residents within the pilot projects perimeter were offered green infrastructure options to try on their terrace or property, with no mandatory costs for the resident, such as:

- » Permeable pavement
- » Stormwater terraces (bronze, silver or gold options depending on vegetation, infiltration impact)
- » Rock cribs
- » Rain gardens
- » Rain barrels
- » Property suggestions like: redirecting downspouts off of impervious areas, native landscaping

In addition to the options for residents to choose for the terrace in front of their home, which is part of the City-owned street right of way, the City of Madison Engineering Division also launched a reimbursement incentive for those in the pilot project to build green infrastructure projects, such as rain gardens, on their private land.

If you want to learn more about green infrastructure, the reimbursement program, want to explore working with the City on a future project, email engineer@cityofmadison.com or visit: cityofmadison.com/engineering/projects/green-infrastructure-study.



City Engineering and United States Geological Survey presented a virtual public informational meeting in June about the City's Green Infrastructure Pilot Program.

A Word from the City Engineer, Rob Phillips

Our community is resilient, strong and creative. Whether rising to the challenges presented by the worst flooding in our city's history in 2018, or standing strong in the face of the COVID-19 public health emergency, these events have impacted our everyday lives. However, they do not prevent the Engineering Division from moving forward with stormwater infrastructure projects and working in collaboration with our community.

In 2019, the Engineering Division moved from emergency response and repair after the historic floods, to engaging in widespread community discussions with the first round of watershed public information meetings. Staff presented, listened and answered the public's concerns during face-to-face meetings. Residents were given options to better prepare their homes and focus groups were facilitated to learn more specifically where residents are still struggling with stormwater issues.

Our world once again changed in March. With Safer at Home orders and social distancing protocols in place, Engineering staff rapidly shifted gears to conduct community outreach virtually. In *Going Virtual: COVID-19 Challenges Won't Stop Watershed Study Progress* (page 2), staff shares how the virtual platform has helped to connect with more people than in person, and what this means for future public participation.

More time at home has resulted in many residents noticing what stormwater improvements can be made on their property. Residents are embracing green infrastructure projects such as stormwater terraces, rain gardens and rain barrels. Learn about a pilot program launched in the Westmorland neighborhood as part of a reconstruction project (page 1). Also, if you took advantage of time at home by building a "quarantine rain garden" share it with us as part of our City's renewed goal to reach 1000 rain gardens (page 3).

Finally, a thank you to all of our Engineering field staff and contractors for rising to the challenge of safely providing frontline service during this pandemic.

Rob Phillips

Leaf-free Streets: Sign Up for Text and Email Alerts

Keeping our streets leaf-free before the rain can have a big impact on reducing dissolved phosphorus from entering our lakes, river, and streams. More than 50 percent of the annual amount of phosphorus in urban stormwater comes from leaf piles in streets. When it rains, stormwater flows through the piles creating a “leaf tea.” Ripple Effects will send an alert one to two days before a rain event, reminding you it’s time to take action. Alerts will only be sent between October 1st and November 30th. Sign up at ripple-effects.com/Leaf-free-Streets.

UW-Madison Shows its Love for Lakes

The Clean Lakes Alliance has brought together the University of Wisconsin-Madison, the City of Madison and 17 other partners to prepare and advance the continuing work for cleaner water and healthy lakes. The team is actively working to develop bold but realistic goals that will reshape recommended community actions and funding strategies to ensure Greater Madison’s five Yahara lakes are clean, safe, and accessible for everyone.

With the UW campus spanning approximately 4.5 miles of lakeshore, nearly 1/5 shoreline of Lake Mendota, it’s a popular destination for relaxing and recreational sports year around. UW-Madison students, staff, and faculty are working across disciplines and research labs to help improve the health of our watershed. Learn more about what you can do, cleanlakesalliance.org/yahara-clean-compact-charting-a-path-forward.

Going Virtual: COVID-19 Challenges Won’t Stop Watershed Study Progress

While the pandemic continues to impact our community, and the way City Engineering approaches work from a safe physical distance, it’s not stopping progress of the City’s Watershed Studies.

The second year of Watershed Studies are underway as City Engineers continue to gather information, hold virtual public information meetings and ask for the public’s help in reporting flooding.

“We’ve had to move our public information meetings and focus groups to a virtual format,” Janet Schmidt, City of Madison Engineering Division Principal Engineer for the Stormwater Section, said. “So far, we’ve had great success reaching our community, and actually connecting with more people than in person. We know it’s not the same as face-to-face, but given COVID-19, we want to make sure we’re able to reach people virtually and safely as we move forward in this process.”

These meetings will help inform future decisions on flood mitigation priorities and will help form the basis for prioritization and budgeting for future improvements.

“The first few virtual meetings included a presentation, question and answer format and breakout rooms, all virtually. We then post them online [to the watershed study project page] for anyone who missed the virtual meeting,” Schmidt said. “We had the same amount of staff on hand to answer questions, and the community

responded with typing in questions and seeing the presentation and maps to get answers they needed. The virtual format is working really well, and we’re reaching even more people.”

There are currently ten watersheds that are being studied since the inception of the program. The first four studies will be nearing completion in the next 6-10 months and will offer proposed solutions for residents and property owners. These four initial studies include Pheasant Branch, Spring Harbor, Stricker’s/Mendota and West Wingra watersheds. For more information on the studies, visit the City of Madison Flooding website focusing on the studies: cityofmadison.com/flooding/city-initiatives/watershed-studies.

Public informational meetings for the Willow Creek Watershed and for the Isthmus East and Yahara River Watershed are tentatively scheduled for the fall of 2020. Meetings in the near future will be held virtually. These meetings will also be recorded and posted to the city’s website.

In 2021, we will start studies on the east side, including the Starkweather Creek watershed and continuing work on the Isthmus East and Yahara River watershed. Residents should stay connected with City Engineering to stay informed on when the meetings will happen. To stay connected, visit the City’s flooding website to sign up for email lists, resources and more: cityofmadison.com/flooding.

JOIN US IN KEEPING STREETS LEAF-FREE THIS FALL!

Leaf-free Streets
For Clean Waters

We are removing street leaves before the rain to protect
Lake Mendota



Sign up to receive Rain Alerts at ripple-effects.com/Leaf-free-Streets

My Sump Pump is Always Running: What Should I Do?

Sump pumps should discharge away from the foundation and in a manner the water will not repeatedly be cycled by the sump pump system. Sump pumps can discharge directly to the grass, to an infiltration bed on the property, connect to the City storm sewer inlet (if nearby), or directly to the street through the curb head. Sump pumps are not allowed to be hooked up to the home's pumping system which discharges to the sanitary sewer.

Residents should weigh their options. If the pump runs often and discharges to the grass, it can create a soggy yard or wet sidewalk, potentially kill the grass and become a nuisance to your neighbors. Connecting directly to a storm sewer inlet yields the best result, but it's also the most expensive option. It is also not a possibility for areas without storm sewer. Running a pipe under the sidewalk and through the curb head so water discharges directly to the street might be an option. This requires monitoring and maintenance by the property owner as it may still create icing issues in the winter. Ice should be removed by the property owner to allow flow through the gutter. The discharge in the street decreases safety hazards of icy conditions caused by discharges across the sidewalk.

If you have no storm sewer on your street, and your sump pump discharge creates algae issues in the summer and icy problems in the winter, City Engineering may be able to extend storm sewer to your property.

If you know of a sump pump discharge problem that needs to be fixed, you can report it using the Report a Problem form: cityofmadison.com/reportaproblem/sidewalk.cfm.



Residential sump pump discharging water from end of flexible black hose.



Standard sump "crock" where the water from the perimeter is piped below the floor.

Be Part of the 1000 Rain Garden Goal!

You can build a rain garden that is easy on your wallet and environment for under \$100.

Engineering's Maddie Dumas, Greenway Vegetation Coordinator, and Phil Gaebler, Stormwater Engineer, join Public Information Officer, Hannah Mohelnitzky, to break this do-it-yourself project down into manageable steps on City Engineering's podcast, "Everyday Engineering." Tune into the episode, "Rain, Rain Go in my Garden," available on Apple iTunes and Google Play.

Learn more about the City's 1000 Rain Garden Goal and view in-depth guides and suggested plant lists at: cityofmadison.com/engineering/stormwater/raingardens.



Jenifer St.



Two near east side rain gardens built during Safer at Home Orders. Residents discovered it doesn't take much to start building a garden – a shovel, tarp or wheel barrow and string. It can be as inexpensive as you choose.

Don't Put Down the Drain

One of the biggest misconceptions about drains in our home is that you can put anything down them – as long as it can be chased away by water, drain cleaner or a plunger. But, if it never makes it through the pipe, chances are you'll have major issues that will go deep into your pocket. Even items labeled "flushable" can clog pipes, tangle pumps and result in messy and costly sewer backups.

NEVER FLUSH

- » Baby wipes, disinfectant wipes, moist wipes
- » Vitamins, medicines or other pharmaceuticals
- » Toilet bowl scrub pads
- » Swiffer® products
- » Napkins (paper or cloth)
- » Dental floss
- » Sanitary napkins, tampons
- » Band-Aids® or dressings
- » Plastic bags or wrappers
- » Kitty litter
- » Cat feces or bagged dog feces
- » Fish gravel
- » Fats, oils and greases

Before you grind anything up in your garbage disposal, tune into the City Engineering Division's podcast, Everyday Engineering. In the episode, "Down the drain: bowling balls, bacon grease, and Legos," Public Information Officer Hannah Mohelnitzky hosts a lively discussion with Engineering Operations Supervisor, Jay Schlimgen, and Madison Metropolitan Sewerage District Pollution Prevention Specialist, Emily Jones, about what you should and shouldn't be putting down your drain. Everyday Engineering is available on Apple iTunes and Google Play.

Traffic Medians get a Makeover to Promote Environment, Pollinators

City of Madison Engineering and Parks Divisions have teamed up on a pilot project to convert selected traditionally mowed turf-grass traffic medians to a low-mow, low growing fescue and wildflower mix. Seed mixes were carefully selected to tolerate the harsh environment of a traffic median, including salt and drought conditions. Turf grass is typically mowed every 7 to 14 days, whereas a low-mow vegetation would only need to be mowed a few times during the growing season.

“The new native vegetation will take time to get established,” Carissa Wegner, Landscape Architect with City Engineering said. “We ask for your patience and understanding during the next few years. City Engineering will closely monitor test medians for invasive weeds and plant height.”

Wegner highlighted benefits of using native vegetation. “First, reduced mowing leads to reduced gas use and therefore cleaner air. Second, mowing operators are safer, as selected medians may be narrow or located along high speed roads. Third, selected seed mixes have native flowers to provide a pollinator food source. And last, native vegetation showcases southern Wisconsin’s habitat, providing a sense of place.”

The turf to low-mow conversion is taking place in the fall of 2020 along high visibility corridors such as Fish Hatchery, John Nolen, East Washington, Packers, Gammon and Cottage Grove Road as well other locations.

Residents can email questions or comments to Carissa Wegner, Landscape Architect, at cwegner@cityofmadison.com.



Sand coreopsis blooms in a median on S High Point Rd while Engineering restoration intern Talea Simmons removes weeds.



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Salt. Certified.

**REDUCE SALT USE THIS WINTER.
CHOOSE A RESPONSIBLE WINTER
MAINTENANCE PROFESSIONAL
WHO IS EDUCATED ON SALT
IMPACTS TO OUR ENVIRONMENT.**



**For a full list of Salt Certified Applicators
in Madison & upcoming Salt Certification
Training dates, visit: cityofmadison.com/live-work/sustainability/winter-salt-certification**

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