



# ON THE LAND

## SPRING 2019

## Celebrating 70 Years of Getting Conservation on the Ground

## Save the Date

The Cuyahoga Soil & Water Conservation District has been working with public and private landowners to promote natural resource protection since April 1949. Since then, development has extended into the far corners of the county, diminishing farms, impacting forests and contributing to erosion and water quality issues. Today, the Cuyahoga SWCD continues to promote wise use of our land and water through a variety of programs, both passive and active. Now with 13 pairs of “boots on the ground” the District’s impact is significant.

### Cuyahoga SWCD 70th Annual Meeting and Supervisor Election

**Monday, October 21st**

**Merwin’s Wharf - 1785 Merwin Ave. - Cleveland**

Join us for this celebratory event featuring Scott Hardy of the Ohio Sea Grant who will talk about the land and water interface and the Sea Grant’s green infrastructure initiative. We will highlight 70 years of conservation, honor our staff and board members, shine the spotlight on this year’s Conservation Heroes,

talk about our future plans, and enjoy food and beverage along the Cuyahoga River.



## Spring Has Sprung!

Spring has officially sprung. Some of us would-be green thumbs have started getting our hands dirty with seeds and soil. I am one such toiler as evidenced by the permanent dirt under my fingernails.

This year, I’m doing things a little differently. Instead of the normal vegetable plants that I’ve grown accustomed to personally starting, I am growing pollinator plants professionally for Cuyahoga SWCD. This is through funding from Bayer’s Feed A Bee program.

We chose to grow our own starts this year to make our grant dollars go further and to gain hands-on



*Plants under 400 watt metal-halide bulb.*

experience starting pollinator plants so that we may add to our public programming. As it stands, we will be installing three pollinator sites with a potential fourth site being very probable.

All in all, our success rate with germination and potting up has

been high. Echinacea and black eyed susans have been the easiest to start which probably accounts for them being so ubiquitous in native wildflower gardens. The lobelias and prairie smoke have been really slow growing. The bergamot is dainty, but flying. The milkweed is statuesque. The blue sage looks amazing. The blazing star and rattlesnake master look rather similar in the seedlings stage, and I’m hoping I didn’t make a label mistake along the way. The only true failure was the columbine, which almost entirely failed to germinate. It happens, but we try not to get

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Spring: continued from Page 1  
frustrated.

The perennial wildflowers will be complemented with pollinator shrubs. We selected elderberry, serviceberry, raspberry, and witch hazel. Besides having awesome bee-friendly flowers, these shrubs have ethnobotanical properties, including food, medicine, and cosmetological purposes.

As Cuyahoga SWCD celebrates its 70th year anniversary this year, we look forward to adding another piece of the conservation pie to our toolkit.

**For more information, contact**  
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**[jhusher@cuyahogawcd.org](mailto:jhusher@cuyahogawcd.org)**



*Milkweed, looking statuesque a week after transplanting.*



*Top: Black eyed susan plugs, waiting to be potted up.*

*Left: Bergamot, looking mangled immediately after transplanting.*



## Tidy Up Your Storm Drain

We know you are doing it inside your house, so why not outside too? Marie Kondo's book *The Life Changing Magic of Tidying-Up* and her hit Netflix series has been sweeping the nation (pun intended). We took it to the next level and Marie Kondo'ed the storm drains around our building. Also, we made Marie Kondo a verb.

Join us in cleaning your storm drains of debris. After all, only rain should go down that drain.

**\*\*Please be safe when cleaning your drain\*\***



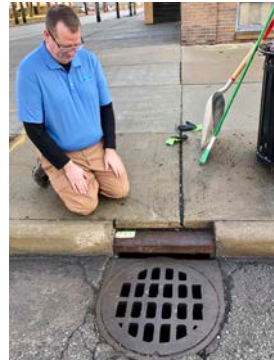
Does your storm drain spark joy?



If not, declutter your storm drain.



Take a step back to admire your storm drain.



Thank your storm drain for all it does for you.



# Post Construction Stormwater Management

The Water Quality Act of 1987 addressed the issue of polluted stormwater runoff by defining industrial stormwater dischargers and municipal separate storm sewer systems (MS4s) as point source contributors and required them to obtain a National Pollution Discharge Elimination System (NPDES) permit. Phase 1 MS4s were categorized as large and medium population centers. Later, Phase 2 MS4s were categorized as all other urbanized areas not covered by Phase 1 and other non-traditional entities.

The MS4 permits contain a number of Minimum Control Measures (MCMs) that define how the discharger is required to address and mitigate polluted runoff. This article will focus on MCM 5, Post-Construction Stormwater Management in New Development and Redevelopment; and some items this MCM is doing well and other things that could be improved upon.



*Pervious paver parking lots require frequent inspections and routine maintenance.*

In simple terms, this minimum control measure requires MS4s to require that new development and redevelopment sites install stormwater control measures (SCMs) designed to treat polluted runoff. It also requires MS4s to ensure that an adequate program is established to ensure long-term maintenance. The first part of this requirement appears to be operating effectively. MS4 operators



*Cuyahoga SWCD staff performing an inspection of a bio-retention cell.*

are aware of the requirement, the SCMs are reviewed during construction permitting, the SCMs are inspected during installation, new technologies are constantly being discussed, and design standards updated. Unfortunately, the second part is where the breakdown begins.

Once the SCMs are installed, they often fall into an “out of sight; out of mind” status with the property owners. A couple years of neglect or sub-par maintenance and the SCMs are barely functioning correctly. Worse yet the SCMs may have completely failed.

A probable source of this problem is the leeway the permit grants MS4s in implementing a post-construction inspection system. The exact language of the Ohio Small MS4 permit is: “You shall ensure adequate long-term operation and maintenance of the BMPs (SCMs).” The word adequate is not adequately defined by the permit and the resulting ambiguity leads to a variety of different programs with mixed results.

Some programs rely on the property owner hiring a third party or performing a self-inspection and sending the results to the MS4. The concern with this method is whether the property owner or third party agent is properly trained to identify maintenance deficiencies and get them corrected. A hybrid program

consists of an MS4 staffer reviewing the self-inspection reports and following-up with the property owner to ensure required maintenance was performed.

Unfortunately, many MS4s do not have staff dedicated to stormwater issues and the reviews or follow-ups are never done. A third way is for the MS4 or a contracted agent to perform an inspection, prepare a report, and conduct necessary follow-ups.



*Green roofs require prior coordination and safety equipment for inspections and maintenance.*

At Cuyahoga SWCD, we advocate for this third way. Cuyahoga SWCD contracts with local MS4s to perform inspections, write reports, and follow-up with property owners to ensure maintenance is performed. Additionally, this method allows Cuyahoga SWCD staff to interact with the public and provide education on stormwater topics. An educated public is more likely to respect and properly care for these important pieces of clean water infrastructure.

Cuyahoga SWCD recognizes there is always room for improvement. As such, we continually work with our partner MS4s to find ways to make the program more efficient. A couple of focus areas include the MS4 passing strong enforcement legislation for when a property owner does not voluntarily comply with

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# YOU Are the Champions!

## Take Action: in your yard, by the streams, and in your community to help restore Rocky River and Euclid Creek!

Pledge to take watershed friendly actions in your yard such as shrinking your lawn with native plants, removing non-native plants and shrubs, reducing or eliminating chemical use, installing a rain barrel or building a rain garden and more! Adopting three or more of these actions in your yard or one in your community earns you your very own Champion sign!

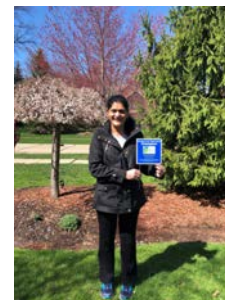
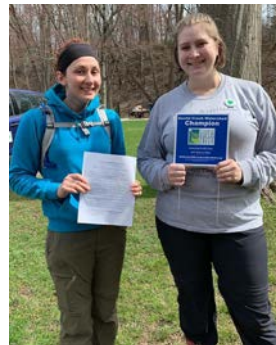
**Pledges are available at the watershed websites or you can request a paper pledge from your Watershed Program Managers.**

### Jared Bartley

Rocky River Watershed Program Manager  
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jbartley@cuyahogawcd.org  
www.myrockyriver.org

### Elizabeth Hiser

Euclid Creek Watershed Program Manager  
216.524.6580 x1002  
ehiser@cuyahogawcd.org  
www.euclidcreekwatershed.org



## Congratulations to Kelly Butauski, our first Euclid Creek Watershed Champion!

In her yard, Kelly has pledged to leave her leaves as mulch or compost, save water by not watering the lawn, as well as practice mindful use (or no use at all) of chemicals, nutrients, and pesticides.

Kelly is a Friends of Euclid Creek Education Committee member. In addition, she lets her neighbors know about habits they can take to help Euclid Creek. She also volunteers at Euclid Creek Watershed stream clean-ups!

**Thank you, Kelly, for being a Champion for Euclid Creek!**





# Welcome to the Cahoon Creek-Frontal Lake Erie Watershed

Efforts to restore the Cahoon Creek-Frontal Lake Erie watershed are well underway since Jaimie Johnson has been brought onboard as the newest watershed coordinator.

A Nonpoint Source Implementation Strategy (NPS-IS) plan has been developed and projects to improve and restore the watershed are currently being identified. The next step would be applying for grants to implement those projects.

In the meantime, other activities and events are planned in the Cahoon Creek-Frontal Lake Erie watershed in efforts to help cleanup and protect our local watershed, and the Lake Erie watershed as a whole.



*Sperry Creek at Reese Park.*

Get involved in stream cleanups near you: such as, Sperry Creek, Columbia Creek, and Cahoon Creek stream cleanups in Bay Village, or the annual Rocky River stream cleanup at Rocky River Reservation.

Help your neighborhood in the fight against stormwater runoff by installing rain barrels or rain gardens at one of our workshops. Join us for tree plantings and other volunteer events that are advertised on our events calendar page of our website.

If you reside in the Cahoon Creek-Frontal Lake Erie watershed and have concerns about your watershed, please contact Jaimie and she will be happy to help you with all of your questions and concerns!



*Dover Ditch Stream Restoration in Westlake.*



**For more information, contact Jaimie Johnson**  
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*Post construction: continued from Page 3*

maintenance requirements. The MS4 should identify a responsible person to coordinate stormwater related issues and a funding mechanism to ensure the program is supported. Finally, the MS4 can provide training and education programs for property owners with SCMs.

In the past few years, regulators from the Ohio EPA have been focusing on MCM 5 and requiring MS4s to implement a program that addresses long-term operations and maintenance. After all, it is the post-construction SCMs that will live on in a new or redevelopment site in perpetuity, providing treatment for polluted runoff. It only makes sense that the SCMs are properly maintained so that they continue to protect our water quality.

**For more information, contact**

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CELEBRATING 70 YEARS OF CONSERVATION | 1949-2019

**[www.cuyahogawcd.org](http://www.cuyahogawcd.org)**

**Love the newsletter but hate the paper?**

Contact Amy Roskilly,

216.524.6580 x1005

[aroskilly@cuyahogawcd.org](mailto:aroskilly@cuyahogawcd.org)

We can put you on our broadcast email list that includes an electronic version of our newsletter and other pertinent conservation news!

# Proper Planting and Care of a New Tree

Purchasing a tree is a lifelong investment. How well this investment grows depends on the type of tree selected, the planting location, the care provided during planting, and the follow-up care after planting.

## When to Plant

Ideally, trees are planted in the dormant season—in the fall after leaf drop or in early spring before budbreak. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. Healthy balled and burlapped or container trees, however, can be planted throughout the growing season if given appropriate care. In tropical and subtropical climates where trees grow year round, any time is a good time to plant a tree, provided that sufficient water is available.

## Planting Stress

Balled and burlap trees lose a significant portion of their root system when dug at the nursery. As a result, trees commonly exhibit what is known as “transplant shock.” Transplant shock is a state of slowed growth and reduced vitality following transplanting. Container trees may also experience transplant shock, particularly if they have circling or kinked roots that must be cut. Proper site preparation, careful handling to prevent further root damage, and good follow-up care reduces transplant shock and promotes faster recovery.

**Carefully follow the nine simple steps below to help your tree establish quickly in its new location. Note: before you begin planting your tree, be sure you have located all underground utilities prior to digging.**

### 1. Identify the trunk flare.

The trunk flare (or root flare) is where the trunk expands at the base of the tree. This point should be partially visible after the tree has been planted. Remove excess soil from the top of the root ball prior to planting if the root flare is not visible.

### 2. Dig a shallow, broad planting hole.

Holes should be two to three times wider than the root ball, but only as deep as the root ball. Digging a broad planting pit breaks up the surrounding soil and provides newly emerging tree roots room to expand.

### 3. Remove the containers or cut away the wire basket.

Inspect container root balls for circling roots. Straighten, cut, or remove them. Expose the trunk flare, if necessary.

### 4. Place the tree at the proper height.

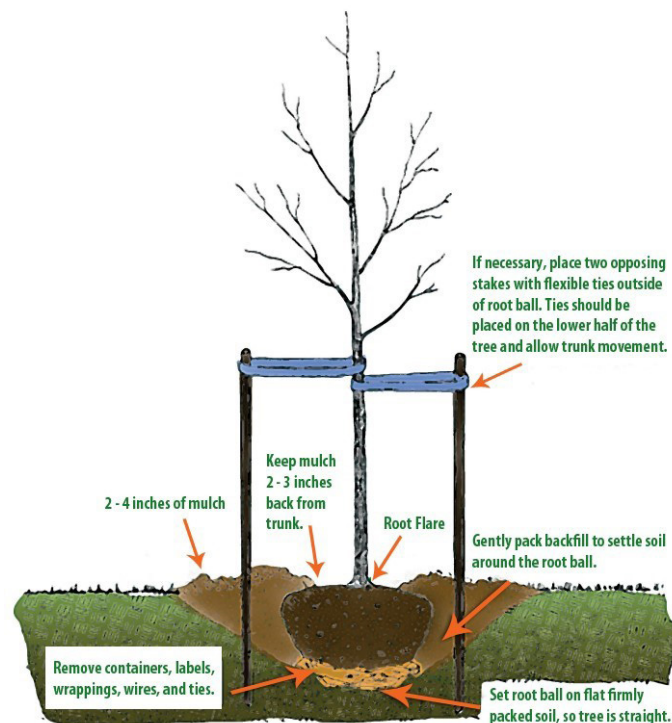
Take care to dig the hole to the proper depth—and no more. The majority of a tree’s roots develop in the top 12 inches of soil. If the tree is planted too deep, new roots will have difficulty developing because of a lack of oxygen. In poorly drained or heavily clayed soils, trees can be planted with the base of the trunk flare two to three inches above grade. When placing the tree in the hole, lift by the root ball, not the trunk.

### 5. Straighten the tree in the hole.

Before backfilling, have someone view the tree from several directions to confirm it is straight. Once planted, it is difficult to reposition the tree.

### 6. Fill the hole gently, but firmly.

Pack soil around the base of the root ball to stabilize it. If the root ball is





wrapped, carefully remove any fabric, plastic, string, and/or wire from around the root ball to prevent girdling and to facilitate root growth. Fill the remainder of the hole, firmly packing the soil to eliminate air pockets that may dry out roots. Further reduce air pockets by watering periodically while backfilling. Avoid fertilization at the time of planting.

### 7. Stake the tree, if necessary.

Studies have shown that trees establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting. Staking may be required, however, when planting bare root stock or planting on windy sites. Stakes may also offer protection against lawnmower damage and vandalism. One or two stakes used in conjunction with a wide, flexible tie material on the lower half of the tree will hold the tree upright and minimize injury to the trunk, yet still allow movement. Remove support staking and ties after the first year of growth.

### 8. Mulch the base of the tree.

Mulch is organic matter spread around the base of the tree to hold moisture, moderate soil temperature extremes and reduce grass and weed competition. Common mulches include leaf litter, pine straw, shredded bark, peat moss, or composted wood chips. A two to four inch layer is ideal. More than four inches may cause a problem with oxygen and moisture levels. Piling mulch right up against the trunk of a tree may cause decay of the living bark. A mulch-free area, one to two inches wide at the base of the tree, reduces moist bark conditions and prevents decay.



### 9. Provide follow-up care

Keep the soil moist, but not over waterlogged. Water trees at least once a week and more frequently during hot, windy weather. When the soil is dry below the surface of the mulch, it is time to water. If you have planted in the spring, continue watering until mid-fall, tapering off as lower temperatures require less-frequent watering.

For more tree owner information, visit [www.treesaregood.org/treeowner](http://www.treesaregood.org/treeowner)



*Remove any fabric, plastic, string, and/or wire from around the root ball to prevent girdling and to facilitate root growth.*



*Megan watering a properly mulched tree. Note the mulch does not touch the tree.*



*This volcano mulching madness has to stop. Just say no to volcano!*

## Pledge to Plant

Launched on Arbor Day, Cuyahoga SWCD is asking you to pledge to plant. Every year, trees are given away and we suspect many of those don't end up planted correctly or planted at all.

Sign our pledge now and we will give you a tree in the Fall with supplemental material on how to care for your tree.

We will provide follow up advice and check in to see how your tree is doing. Supplies are limited so sign up today!

Visit our website at  
[www.cuyahogawcd.org](http://www.cuyahogawcd.org)  
or contact Amy Roskilly,  
216.524.6580 x1005  
[aroskilly@cuyahogawcd.org](mailto:aroskilly@cuyahogawcd.org)

## Tree Huggers Workshops

\$10 registration fee  
(includes one 1.3 qt. native tree and instructions)

Learn the basics of tree planting and care, including a hands-on tree planting demonstration and an overview of the county-wide tree canopy restoration efforts

May 8 - Lakeview Cemetary  
May 18 - Tri-C Eastern Campus  
May 22 - Olmsted Township Hall

[www.cuyahogawcd.org](http://www.cuyahogawcd.org)  
click on Events

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## Teacher Workshops

CSWCD holds teacher workshops to expose educators to environmental education curriculum. In addition to meeting the required grade-level benchmarks, the lessons are hands-on and action-oriented.

Many of the curriculum programs we teach include student activities in Spanish. Our education program managers can offer graduate credits through Ashland University for our multi-day workshops. These are train-the-trainer workshops. The teacher will learn the materials and incorporate them into their classroom. Some grants for environmental education equipment and outdoor learning labs require these certifications.

This summer teachers can join us for two, three or five days as we explore the many benefits of project based learning for K-12 students. Choose

from a two day Project WET and Wonders of Wetlands workshop, a three day Project Wild, Aquatic Wild and Project Learning Tree workshop or join us for all five days. Graduate credits will be an option.

Participants will receive curriculum guides, tour local field trip sites and school learning labs and participate in service learning projects. Speakers from a variety of organizations will discuss programs and funding sources available for schools.

### **Summer teacher workshops July 8th to 12th**

Register at  
[www.cuyahogawcd.org/events](http://www.cuyahogawcd.org/events)

**For more information, contact  
Jacki Zevenbergen  
216.524.6580 x1006  
[jzevenbergen@cuyahogawcd.org](mailto:jzevenbergen@cuyahogawcd.org)**



*Become a bug in a stream and see what challenges you would face by playing "Macroinvertebrate Mayhem."*



*Learn what limiting factors increase and decrease an animal population from year to year by playing "Oh, Deer!"*