

# **Marion County Soil & Water Conservation**

## **District**



# **2021**

# **Annual Report**



— MARION COUNTY —  
**SOIL AND WATER**  
— CONSERVATION DISTRICT —

# REPORT FROM THE CHAIR

MAGGIE GOEGLIN

While the COVID-19 pandemic has continued to adversely affect our community in 2021, the Marion County Soil and Water Conservation District (MCSWCD) team has worked diligently to maintain crucial financial, technical, and other related natural resource services throughout Central Indiana. Enormous thanks are due to the City of Indianapolis DPW, Indiana State Department of Agriculture–Division of Soil Conservation, and local non-profits such as Reconnecting to Our Waterways and the Nina Mason Pulliam Charitable Trust as well as affiliate donors, for their support of the MCSWCD. Through their support, the District is able to offer a highly-skilled, professional team who truly work wonders.

At the Board level, the MCSWCD has welcomed two new Supervisors: Tyler Gough, Executive Director of Indy Urban Acres and Olivia Speckman, Project Scientist at V3 Companies. Thank you, Tyler and Olivia, for committing your considerable skills and expertise toward governance of our District! We are grateful for your leadership and so glad to have you onboard. (You can read more about them on the last page of this report.)

Currently, our MCSWCD team consists of John Hazlett, our District Manager, whose leadership and initiative are the foundation of all the work we do at the District; Kevin Allison, our Urban Soil Health Specialist; Julie Farr, our Resource Conservationist, and Alena Jones, our Urban Conservationist. (On a side note, please join me in congratulating Alena, who recently had a baby girl, Merida Claire! Welcome to the District, little Merida!) Working safely and effectively within the necessary constraints of social distancing and virtual formats, I am proud of the entire team for their creativity, tenacity, and productive collaborations that have yielded several considerable accomplishments this year and continued to build on all of the great work from previous years.

Here are just a few highlights from their work in 2021:

- ⇒ Our district successfully applied for a Clean Water Indiana 2022 grant through ISDA which will be used to conduct two rainscaping workshops in conjunction with Purdue Extension and Reconnecting to Our



Waterways (ROW). We also finished our CWI 2019 grant funded activities focused on soil health outreach and education.

- ⇒ Our staff prepared throughout 2021 for the new Construction Stormwater General Permit issued by IDEM in late December 2021 to replace the traditional Rule 5 regulations related to erosion and sediment control.
- ⇒ We received SEP funding through ROW to implement two green infrastructure projects in the Lower Fall Creek watershed in 2022, and we continue to update the Lower Fall Creek Watershed Management Plan with hopes of having the plan approved by IDEM in 2022.

As we head into 2022, I think any illusions that the pandemic will soon fade into memory are gone. Instead, we are embracing the “new normal” and looking forward to working alongside our partners to provide direct technical assistance, workshops, site visits, and many other resources and services to the residents of Marion County. If we can assist you, please [reach out](#)! Our talented team would love to tell you more about what they do and how they can help.

# WHAT WE DO...

SOIL - WATER - NATURAL RESOURCES - EDUCATION



## DRAINAGE/FLOOD REDUCTION

Individual consultation for improving homes and neighborhoods. Includes rain gardens, bioswales & other ways to decrease flooding.



## EROSION CONTROL

Providing construction site monitoring, education and technical assistance to protect against sedimentation of our waterways.



## SOIL HEALTH

Furnishing technical, educational and financial resources to urban farmers and growers to build soil health.



## WATER QUALITY

Working to improve our county's water quality by encouraging streambank erosion control, vegetative buffers and green space.



## NATIVE PLANTS

Promoting the use of native plants for landscaping, erosion control & water quality improvements while controlling invasives.



## LAND USE PLANNING

Helping land owners make wise decisions utilizing their natural resources judiciously. This includes soil, water, trees, home sites.

# DISTRICT MANAGER REPORT

JOHN HAZLETT

Our district started 2021 with hopes that we would return to “normal” in terms of our daily operations and like so many organizations we pivoted and provided services either virtually or in person with COVID precautions in place. I’m very proud of our staff’s ability to adapt and continue to provide the unique services we are known for-whether it be one on one private property drainage assistance, construction site erosion and sediment control inspections, and water management and soil health workshops. Whatever 2022 holds, I’m certain our district will continue to fill a need for local technical assistance on natural resource management for the residents of Marion County with the support of our funders and partners.

Below are a few highlights from 2021:



Working with our partner ROW (Reconnecting to Our Waterways) to conduct three workshops throughout the year on rain gardens and rain barrels. Over 70 residents total attended the workshops which are funded through the district’s 2021 Clean Water Indiana (CWI) grant from the Indiana State Department of Agriculture. Attendees took home rain barrels and native plants to install on their properties. A rain garden guide was also developed through the grant.



Over 100 native trees and shrubs were planted with our partners Mud Creek Conservancy District at their Sargent Road Nature Park property. This effort included working with State Senator Kyle Walker and the SB 690 Tree Seedling Program as well as a Weed Wrangle® to clear over a half-acre of invasive honeysuckle prior to the tree planting. Additional native trees and shrubs were planted at Barton Park near downtown with our partner the City of Indianapolis Office of Land Stewardship.



Partnering with Friends of White River to hold two Stream Steward Workshops funded by the Nina Mason Pulliam Charitable Trust’s Partners of the White River program. The workshops were held on Fall Creek and White River and a Stream Steward guide is being developed for future workshops and distribution to riparian property owners. We’d like to especially recognize retiring director Kevin Hardie for all of his work with FOWR-congrats Kevin on your retirement!

# SOIL HEALTH REPORT

KEVIN ALLISON

The Marion County SWCD provides education and technical assistance related to soil health and conservation in urban agriculture. We work to support growers and our conservation partners in realizing the benefits of using soil health principles and practices on farms and gardens.



2021 highlights included:

- Technical assistance with 33 growers and 25 farm visits.
- Forty-one educational events including on-farm workshops, virtual workshops, demonstration garden tours, Indiana Conservation Partnership staff trainings, and statewide and local presentations.
- Assisting the USDA Natural

Resources Conservation Service state technology and programs staff to enhance NRCS conservation practice standards and federal programs for use in urban and small-scale agriculture. Programs such as the Environmental Quality Incentive Program (EQIP) now better support growers with incentives for conservation practices like mulching or cover crops at rates that are conducive to this scale and style of agriculture. The USDA-NRCS is committed to supporting urban agriculture and it is exciting to help these efforts progress.

- Participation in state and local Purdue Extension urban agriculture state and local advisory committees and collaboration with Purdue Extension – Marion County on local technical assistance and education, including assisting with urban agriculture courses, workshop series, and special projects such as SARE funded youth education at Felege Hiywot.



- Completion of the Clean Water Indiana 2019 – 2021 grant, which included soil health and native planting workshops, material development, and soil health trials on four local farms.
- Co-presenting with Jerod Chew, USDA-NRCS District Conservationist and Amy Matthews of Mad Farmers Collective to inform the NRCS Central Region Agronomy Team on urban agriculture.
- Growing no-till vegetables at the SWCD Demonstration Garden while using crop rotations, organic mulches, cover crops, and fertility management to improve soil health and water conservation.
- Donating 77 pounds of produce through the Society of St. Andrew which provided more than 308 servings of food to people in need.
- Distribution of cover crop seed packages through workshops and Indianapolis Public Library branches and the development of how-to-documents on how to plant and manage them.



Special thanks to the USDA Natural Resources Conservation Service and the Indiana State Department of Agriculture's Clean Water Indiana program for their continued support of the Marion County SWCD's soil health efforts. In 2022, we will continue to assist urban agriculture and the gardening community through workshops, technical assistance, and resource development. Stay tuned with our [newsletter](#) and always feel free to reach out to us for [conservation assistance](#).

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And if you still have time for a book or two before the vegetable season ramps up, my two favorite reads year come highly recommended. "The Living Soil Handbook: The No-Till Grower's Guide to Ecological Market Gardening" by Jesse Frost and "The No-Till Organic Vegetable Farm" by Daniel Mays both provide excellent and practical insight into growing food with a soil health mindset. To all the growers, best of luck in 2022 and I look forward to working with you.



## THANK YOU 2021 DONORS!

Rick Bein  
Eco Logic, LLC  
Fall Creek Garden Club  
Rebecca Fletcher  
Edward Ramthun  
Dennis Slaughter  
Larry Sutterer

## URBAN CONSERVATIONIST REPORT

ALENA JONES, CESSWI



In 2021 the urban conservation program conducted more than 500 erosion and sediment control inspections, including routine inspections of active construction sites and inspections to look into public complaints made either to the District or to the Indiana Department of Environmental Management. We also reviewed stormwater pollution prevention plans for nearly 30 projects through the [urban conservation program](#), helping ensure that public projects in the City of Indianapolis are taking adequate steps to protect our soil and water. As part of the District's partnership with the city, program staff completed training for

city staff and inspectors on erosion and sediment pollution measures to be aware of while they are out inspecting construction sites, increasing the number of trained eyes that can spot a problem and help sites stay in compliance. Behind-the-scenes work in 2021 included streamlining inspection processes, updating tracking systems, and working with City colleagues to better understand noncompliance trends amongst various types of private construction sites to allow for more targeted outreach and technical assistance in pursuit of improved compliance rates. 2021 also brought consistently record breaking success in compliance rates for City projects - congratulations to our colleagues for their hard work!

# RESOURCE CONSERVATIONIST REPORT

JULIE HAXTON FARR

As I have been working on this year's annual report, I've been reminded of how beneficial it is to look at not only this past year's accomplishments but also how the need for services this year compares to previous reports. This year our number of requests for assistance on land use issues came back to a more "normal" number as compared to 2020 when we received almost twice the average number of requests (probably due to literally everyone being at home most of the time).

One thing we have noticed over the last several years is that the number of calls asking for assistance with streambank erosion problems is steadily increasing. This year 19% of the calls we received for technical assistance were related to this type of erosion. Some homeowners are experiencing relatively slight increases in erosion which is still disturbing when they see their yards decreasing in usable size.

Some homeowners, however, are experiencing severe erosion which is causing damage to not only their yards but also the foundations of sheds, garages and sometimes even their homes. Solutions to these problems are crucial for these homeowners. In response, the SWCD and Friends of White River held two workshops this past year, and we have been working on a Stream Steward guide to put helpful information into the hands

## STREAM STEWARD GUIDE

A RESOURCE FOR RIPARIAN PROPERTY OWNERS



of landowners of riparian properties. The workshops and guide are being funded by the Nina Mason Pulliam Charitable Trust's Partners of the White River program. Future workshops are being planned for 2022.

As we provide technical assistance to landowners we also are increasingly aware of the need for improvements in making future land use decisions



Heavy rates of sedimentation creates an unhealthy and unstable stream

which will better provide for the needs of streams to remain stable and healthy as urbanization and climate change increases capacity needs.

For more information on how the District serves our community's natural resources needs visit our website:

[www.marionswcd.org](http://www.marionswcd.org)



Unstable streambanks can cause severe safety & property issues

# DISTRICT CONSERVATIONIST

JEROD CHEW, USDA-NRCS

Many people don't realize that soil, especially healthy soil, is full of life. Millions of species and billions of organisms make up a complex and diverse mix of microscopic and macroscopic life that represents the greatest concentration of biomass anywhere on the planet. Bacteria, algae, microscopic insects, earthworms, beetles, ants, mites, and fungi are among them. All together, their value has been estimated at \$1.5 trillion a year worldwide.

These microbes, which make up only one-half of one percent of the total soil mass, are the yeasts, algae, protozoa, bacteria, nematodes, and fungi that process soil into rich, dark, stable humus. Like other living creatures, the organisms in the soil also need food and shelter. Some feed on dead organic matter, and some eat other microbes. As a group, they cycle nutrients, build the soil and give it structure.

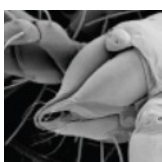
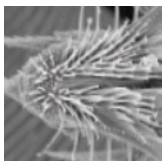
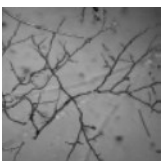
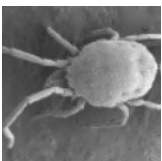
The healthiest soils are those with a diversity and abundance of life. Farmers with the healthiest soils nurture that life by creating a diversity of plant life above the soil surface, with year-round ground cover, no tillage, and judicious pesticide use.

Farming with healthy soils in mind. For those producers, farming centers around feeding the organisms that build healthy soils.

These farmers understand that tillage, the turning of the soil that has been the standard for growing crops for years and years, is disruptive to soil microbes and destructive to the soil system. Instead, they disturb the soil as little as possible. And, they grow a diversity of living plants in the soil as much of the time as practical, covering the soil and offering food to soil microbes through living roots. Those soil organisms cycle nutrients back to the plant, allowing it to grow and flourish.

It's a natural, symbiotic system that leads to healthy soils and more sustainable and profitable agriculture.

The Natural Resources Conservation Service and our conservation partners can help farmers with plans/strategies to improve soil health and biological diversity. Healthy soil benefits yields as well and provides many ecological services such as improved water quality, reduced soil erosion and enhanced wildlife habitat. Contact Jerod at [jerod.chew@usda.gov](mailto:jerod.chew@usda.gov)



## ORGANISM

## WHAT DOES IT DO?

### BACTERIA

Feed on organic matter, store and cycle nitrogen, and decompose pesticides.

### FUNGI

Up to 3,000 species of fungi are in the soil. Some feed on dead organic matter like crop residues that are more difficult to break down—others are parasites that attack other microbes. Some fan out from the root to get more nutrients and hold more water for the plant, delivering nutrients to the plant in exchange for carbon.

### PROTOZOA

Eat bacteria, fungi, and algae. When they eat bacteria, their main food source, they unlock nitrogen that's released into the soil environment slowly. They convert organic nitrogen to inorganic nitrogen that's available to plants.

### MITES

Decompose and shred organic matter as an important part of the nitrogen cycle.

### NEMATODES

These microscopic worms are an important part of the nitrogen cycle. Most are non-pathogenic and don't cause disease. They eat other organisms in the soil.

### EARTHWORMS

Expel partially decomposed organic matter, produce nutrient-rich casts, and make lubricated tunnels that aid soil structure and water movement in the soil.





# Marion County Soil & Water Conservation District

## 2021 Annual Activities Report

January 1 through December 31, 2021

The Marion County Soil and Water Conservation District (SWCD) is a unit of state government, supported primarily by the City-County Council with some funds from state government. The SWCD was established to provide technical assistance to Marion County residents and land users concerning the proper management of soil, water and other related natural resources. We work closely with local government, community organizations and residents on such items as water quality and drainage issues, soil erosion and sedimentation control, urban soil health, green space and wildlife habitat, conservation planning and education to help create a better quality living environment for everyone in the county.

This 2021 annual report was developed to keep city, county, and federal level legislators, government agency directors, and various community leaders informed of our on-going activities. This is just a snapshot of our activities, anyone with any questions or comments are encouraged to contact our Marion Co. SWCD office at 1200 Madison Ave. Suite 200, Indianapolis, IN 46225 for more details. Our phone number is 317-786-1776, and our web site is [www.marionswcd.org](http://www.marionswcd.org)



Assisting Residents with Flooding, Stream Care & Land Use Issues



Construction Site Reviews and Inspections Help Prevent Pollution



Urban Soil Health Program Cover Crops Help Rebuild Soils

### I. 2021 Major Natural Resource Projects Summary

Marion Co. SWCD conservation projects and public outreach efforts were completed to help the district communicate, coordinate, assist, and cooperate with others on conservation needs and solutions for landowners and land users in the county. The efforts can take a minimum of 2-4 hours to several days or weeks or are ongoing depending on the type of project.

Project Summary	Numbers	Date	Comments
<ul style="list-style-type: none"> <li>• <b>Urban Soil Health Program</b></li> </ul>			
<ul style="list-style-type: none"> <li>• Urban Soil Health Program – Presentations/Workshops</li> </ul>	41	during year	Outreach/Training
<ul style="list-style-type: none"> <li>• Urban Soil Health Program – Consultations/Site Visits</li> </ul>	33/25	during year	Outreach/Training
<ul style="list-style-type: none"> <li>• Urban Soil Health Program – Grants to Landowners</li> </ul>	4	during year	Grants
<ul style="list-style-type: none"> <li>• <b>Stormwater Pollution Prevention Program</b></li> </ul>			
<ul style="list-style-type: none"> <li>• City of Indianapolis-DPW &amp; DCE - MOU &amp; NPDES Report</li> </ul>	3 items	during year	MOU, budget, and report
<ul style="list-style-type: none"> <li>• City of Indianapolis-DPW Water Quality Meetings</li> </ul>	20 meetings	during year	Water Quality Issues
<ul style="list-style-type: none"> <li>• <b>Other Projects &amp; Coordination with Conservation Organizations</b></li> </ul>			
<ul style="list-style-type: none"> <li>• Rain Garden Workshops</li> </ul>	2	during year	
<ul style="list-style-type: none"> <li>• Stream Steward Workshops</li> </ul>	2	during year	
<ul style="list-style-type: none"> <li>• Rain Barrel Workshop</li> </ul>	1	during year	
<ul style="list-style-type: none"> <li>• Indiana Association of Conservation Districts (IASWCD) Conference</li> </ul>	3 days-Virtual	1/23-25	Board & Staff Training
<ul style="list-style-type: none"> <li>• Marion Co. SWCD Annual Meeting w- Annual Report</li> </ul>	150+ Virtual	2/16	Reported accomplishments
<ul style="list-style-type: none"> <li>• Distributed newsletter on activities &amp; watershed programs</li> </ul>	4 / yr	during year	1507 on mailing list
<ul style="list-style-type: none"> <li>• Marion County SWCD Website</li> </ul>	13,018 users	during year	Public Outreach



## I. Natural Resource Technical Requests, Contacts, & Visits with Land Users

Through on-site visits, telephone calls and written recommendations, the district assists landowners, land users, and construction site managers with drainage, water management, erosion control, vegetative management options, and other related natural resource topics. These assistance efforts take an estimated amount of hours shown below depending on the type of assistance provided to schedule, inventory available site data, visit the site, plan recommendations, and respond to the request with written comments to the land user, landowner, or contractor.

Township	# Technical Assists Provided (@ 0.5 hr)	# Site Visits Made (@ 1.5 hrs)	# Reports Provided (@ 1 hr)	# Surveys Provided (@ 2 hrs)	# Residents Serviced via Group or HOA	Preliminary Plat Reviews (@ 0.75 hrs)
Center	1	6	3	0	3	28
Decatur	0	7	7	0	?	4
Franklin	3	37	37	4	16	18
Lawrence	1	22	20	12	19	6
Perry	3	5	5	1	?	6
Pike	1	12	10	6	32	4
Warren	3	15	15	11	19	18
Washington	2	30	30	4	107	10
Wayne	1	11	10	0	10	3
<b>TOTAL</b>	<b>15</b>	<b>145</b>	<b>137</b>	<b>38</b>	<b>206</b>	<b>97</b>

## Construction Site, Erosion Control and SWPPP Stormwater Reviews, Contacts & Reports

Township	# SWP3* Reviews Provided (@ 3 hrs)	# Erosion Plan** Inspections Reports (@ 0.75hrs)	# of Site Inspections Made (@ 0.75hrs)	On-site TA Meetings
Center	10	132	131	1
Decatur	2	33	33	0
Franklin	0	69	69	1
Lawrence	3	66	66	0
Perry	4	28	28	1
Pike	0	36	36	0
Warren	1	49	49	0
Washington	2	67	67	1
Wayne	7	62	62	0
<b>TOTAL</b>	<b>29</b>	<b>542</b>	<b>542</b>	<b>4</b>

Notes: \*SWPPP= Stormwater Pollution Prevention Plans  
 \*\*Written Reports Detailing Non-Compliance Issues

## III. State/Federal Cost Share/Grant Projects- SWCD brought into county additional: \$125,682.74

The Marion Co. SWCD is always looking for ways to assist landowners via a variety of county, state, and federal cost share and grant funds to assist with the installation of conservation practices in the county. Local funds are often limited or non-existent for the SWCD to provide monetary assistance for land improvement or land protection conservation measures. The projects can take a minimum of 2-4 days to several months depending on the type of activity. The following program funds are being provided through our joint, cooperative efforts with the USDA- Natural Resources Conservation Service (NRCS) assigned to assist the Marion County SWCD and the Clean Water Indiana Grant Program, administered by the State Department of Agriculture, Division of Soil Conservation and the State Soil Board.

Program	Funds Provided	Type of Projects
NRCS Conservation Programs	\$8,474.26	Acres of Planned and/or Applied Land Conservation Practices
Clean Water Indiana Grant (CWI)	\$10,000.00	General District Operational Funds
Urban Soil Health – NACD 2021 UAC Grant	\$12,500	Urban Soil Health Program - Technical Assistance, Demonstration, Adult Education
Urban Soil Health - Clean Water IN Grant	\$38,901.48	Urban Soil Health Program - Technical Assistance, Demonstration, Adult Education
ISDA – DOSC Regional Support	\$3,636.00	Technical & SWCD Support Staff
NRCS Staff Support	\$52,171.00	District Conservationist

**EACH CITY/COUNTY TAX DOLLAR INVESTED IN THE SWCD LEVERAGES \$1.79 IN OTHER FUNDING**

# SWCD SUPERVISORS

## AND ASSOCIATE SUPERVISORS

**Chairperson — Maggie Goeglein** is the Development Director of the Edna Martin Christian Center, a 76-year-old community center serving Indy’s Martindale-Brightwood neighborhood. Maggie provides direct service in the youth program and assists with fund development and site development for EMCC’s new 12-acre facility. In addition to working with youth, Maggie has managed multiple large corporate service events focused on renovating the new facility and building a youth and seniors garden on the property, and worked with other staff on several successful grant applications totaling nearly \$1 million in funding.

**Vice-Chair — Heather Buck** is a Resource Planner with Christopher B. Burke Engineering working with the MS4 Coordinators from several NPDES Phase II communities in Indiana to develop and implement all components of their Stormwater Quality Management Programs (SWQMP). She completes erosion and sediment control inspections on behalf of both public agencies and private development. Heather completes various water quality evaluations through chemical, physical, and biological data collection and analysis; including IDDE screening, QHEI, macroinvertebrate, and fish community sampling.

**Secretary — Brian Neilson, P.E., LEED AP**, has over 30 years experience working with the public & private engineering sector. He is involved with alternative water & wastewater management, Low Impact Development, green infrastructure, watershed planning, stormwater master planning, combined sewer overflow abatement, water quality assessments of lakes, rivers & streams, and land use & greenway planning, among others.

**Treasurer — Olivia Speckman** is a scientist at V3 Companies. Olivia works with developers, property owners, and regulatory agencies in order to maintain or improve water, stream, and wooded area quality throughout the Midwest. Olivia places importance on bettering the conditions of waterways by gathering with other advocates through Reconnecting to Our Waterways and volunteering for cleanups that directly affect the local waterways. Olivia has a BS degree in Biology from Ball State University and a certification in Watershed Management through the Indiana Watershed Leadership Academy. Olivia brings experience with ArcGIS, AutoCAD, waterway permitting, and stakeholder coordination to the SWCD Board. Olivia currently resides in her hometown of Lawrence with her family and enjoys improving her community through her work on the SWCD board.

**Board Member — Tyler Gough** oversees the planning and operation of all aspects of Indy Urban Acres, a project of the Parks Alliance of Indianapolis. Gough was hired by the Parks Alliance in 2011 to transform eight acres of unused city park land into a sustainable, urban farm. Today, IUA is a system of four organic farms on the east, west, and south sides of Indianapolis that grows and harvests fruits and vegetables to feed more than 50,000 individuals who are food insecure. IUA produces an average of 40,000 pounds of produce, which is delivered to food pantries and directly to families via the Veggie Box program. Gough is driven by the belief that that each member of our community should be able to attain proper nutrition for themselves and their families, and to have access to the educational tools necessary to provide for themselves.

### ASSOCIATE SUPERVISORS

<b>Paula Baldwin</b>	<b>Rick Bein</b>	<b>Marvin Brethauer</b>
<b>Bob Eddleman</b>	<b>Mark Kautz</b>	<b>Robert Kleinops</b>
<b>Beth Mason</b>	<b>Scott Minor</b>	<b>Mark Mongin</b>
<b>Dennis Slaughter</b>	<b>Henry Wallis</b>	<b>Blake Wilson</b>

### SWCD STAFF

<b>John Hazlett, District Manager</b>	<b>Kevin Allison, Soil Health</b>
<b>Alena Jones, Urban Conservationist</b>	<b>Julie Farr, Conservationist</b>
<b>Jerod Chew, District Conservationist</b>	