Volume 44 Issue I Winter 2021



2020 ** ANNUAL REPORT

> The 71st Steuben County Soil & Water Conservation District Annual Meeting is going virtual!

> > March 10, 2021 (details on page 5)

> > > MAN ARE

MISSION

It is the mission of the Steuben County Soil and Water Conservation District (SWCD) to provide leadership and assistance in the proper use and management of soil, water, and related natural resources in Steuben County.

CORE VALUES

We desire to accomplish our mission through providing excellent personal service and facilitating voluntary participation by our residents/land users to put conservation practices on the land.

HISTORY

Across the United States, nearly 3,000 conservation districts - almost one in every county - are helping people conserve land, water, forests, wildlife and related natural resources. Conservation Districts serve as the local hub for connecting land users to direct sources of educational, financial, and technical assistance for applying conservation practices and best management technologies on the land to address soil and water quality problems.

The Steuben County SWCD was organized by Steuben County landowners in 1948. It is a legal subdivision of the State of Indiana, established by the Indiana Soil Conservation Act of 1937. The District is managed by a board of five local supervisors, who are Steuben County residents familiar with the conservation needs and opportunities in the county. Three are elected by Steuben County landowners, and two are appointed by the Indiana State Soil Conservation Board based on a recommendation from current Supervisors. Associate Supervisors are appointed annually, by the SWCD Board, to assist in activities and programs sponsored by the SWCD. Both Board and Associate Supervisors serve the Steuben community on a volunteer basis. Steuben County Government funds the two full-time staff positions.

Steuben County Soil and Water Conservation District (SWCD)

Staff Janel S. Meyer, Administrative Coordinator Tara M. Lee, Resource Conservationist

Natural Resource Conservation Service (NRCS)*

Staff Arthur Franke, District Conservationist

Indiana State Department of Agriculture (ISDA) Division of

Soil Conservation*

Staff

Kate Sanders, Resource Specialist Jennifer Thum, District Support Specialist

2020 Board of Supervisors

Craig Holman, Chairman Chuck Howard, Vice Chairman Gene A. Diehl Kayleen Hart David Perkins

2020 Associate Supervisors

Tim Groosbeck Daniel Oberst

If you have an interest in assisting us with accomplishing our mission, consider joining our team as an Associate Supervisor. Contact the office at (260) 665-3211 ext. 3 for additional details.

*The Steuben County SWCD, NRCS and ISDA Division of Soil Conservation are three of the eight agencies which comprise the Indiana Conservation Partnership (ICP), who all share a common goal of promoting conservation. Arthur Franke is the District Conservationist assigned to Steuben County. Kate Sanders is the Resource Specialist assigned to Steuben & DeKalb Counties. Jennifer Thum is the Northeast Indiana Team Leader & District Support Specialist for 19 counties.

Page 2

FRONT COVER

Conservation Cover Planting in Steuben County, Indiana. Conservation Cover is permanent vegetation established on all or part of a field to protect natural resources. Its use can support or connect other conservation practices within and between fields to:

- Reduce soil erosion and sedimentation
- Improve water quality
- Enhance wildlife habitat and
- Improve air and soil quality
 Photo courtesy of Arthur Franke

INSIDE FRONT COVER

2020 fall cover crop planted into a Steuben County, Indiana soybean field. Photo courtesy of Arthur Franke

THIS PAGE Farming Equipment. Photo courtesy of Janel Meyer



Gene A. Diehl Steuben County Soil and Water Conservation District Board Supervisor (2013 - 2021) Photo courtesy of Steuben County SWCD

IN MEMORIAM

CONTENTS

- 02 The Steuben County Soil and Water Conservation District (SWCD)
- 04 Chairman's Report
- 05 Annual Meeting Information
- 06 2020 Steuben County SWCD Highlights
- 09 Education
- 11 2020 Stewardship Week Poster Contest Winners
- 12 Financial Report
- 14 Affiliate Members
- 15 Conservation Partners
- Spotlight on Conservation
 Indiana, the WLEB and the SWCD
 The Importance of Indiana's Rule 5
 Regulation

Gene A. Diehl June 25, 1944 - January 31, 2021

Gene was a 8-year member of the Steuben County SWCD Board; first appointed in 2013. Gene was a lifelong resident of Northeast Indiana. He attended school at Flint and Orland, graduating from The Orland High School in 1962. On June 19, 1965, in Angola, he married his beautiful wife, Dianne Smith, who survives. Gene retired from New Horizons Baking in Fremont and was a police reserve officer from 1965 through 2009. His hobbies included antique tractors, amateur radios, and train spotting. Gene has been a great asset for the District and will be remembered fondly. He could always be counted on for his dependability and ability to offer a fresh perspective on SWCD programs and activities. He also helped with educational field days; his favorite being the annual 4th Grade Youth Conservation Field Day held at Pokagon State Park. Gene always looked forward to helping the students and staff at this event each year.

Page 3

CHAIRMAN'S REPORT

What does the Steuben County Soil and Water Conservation District (SWCD) do? If I wasn't a member of the SWCD board, I probably couldn't tell you everything they did either. Take some time and ask yourself what Steuben County provides? We live in a very diverse community with much to offer. There are two words that can be used to describe the county; farming and lakes. Often times, individuals are separated into groups, such as "farmers" and "lakers". Sometimes these groups may not be of the same opinion. Steuben County SWCD is often tasked with educating both the farming and lake communities towards a common goal; CONSERVATION. I think it's safe to say at the end of the day we all want to preserve our county's beautiful lakes and provide us with the food, fuel, and fiber we need to survive.

Where does the SWCD fit into all of this? We are primarily a source of education and information with the ability to fund agricultural and urban best management practices that promote soil and water conservation and improve soil health. To accomplish our goals and objectives we work with several local stakeholders including farmers, the Lakes Council, Purdue Extension, and even local government agencies. These partnerships help us stay informed on what the needs of the county are and what we can do to help. By recognizing these needs we are then able to apply for federal, state and local grants that we use to fund projects across the county. We also work closely with the Natural Resources Conservation Service (NRCS) implementing practices they fund across the county.

So what are some of the projects we have assisted with that YOU might recognize? In downtown Angola there are several many of you have probably seen; the new pocket park east of the monument and the rain gardens by the courthouse and Steuben County Community Center, and on Martha Street. Across the county you will see cover crops planted helping prevent erosion, water run-off, and loss of nutrients. I'm sure many of you are also aware of a program we have been putting on for several years now; Steuben County Life. This program has grown steadily over the last few years and really demonstrates what Steuben has to offer. It showcases our beautiful natural resources and businesses within the county; providing tours and educating the community on what they do.

Personally, I have always believed the saying "knowledge is power" isn't given the respect it deserves. The SWCD does not have the power to regulate or enforce: rather, we work to educate and inform on responsible and sustainable conservation. We often partner with other organizations such as Purdue Extension and other agronomic resources farmers use to assist with field days and demonstrations. The SWCD is also a partner in school educational programs with the focus of STEM education (science, technology, engineering, and mathematics). The Health Department and City of Angola have also been key partners over the years. Together we have been working to educate local contractors on septic systems and erosion prevention. The reason many of us are so passionate about the environment is because lakes are such a vital part of the community. They are not only a large revenue source, but also a key recreational option for residents and visitors. The last corner piece to this puzzle is the work we do with the Steuben County Lakes Council. Whether it's assisting with funding water testing or presenting information at meetings, the local Lakes Council gives us an excellent opportunity to communicate with the public. The Lakes Council also supports us with funding much of our educational materials.

What does the future of the Steuben County SWCD look like? As we all know from our experience over the last year, things change, and we can't predict those changes. Growing up in Steuben County and being a 3rd generation family member to serve on the SWCD Board, I know the importance of educating residents and getting best management practices installed around the county. The land and water we have is all that we have and protecting them for future generations is a priority we

ALL share.

Citte

ANNUAL MEETING

SAVE THE DATE MARCH 10, 2021 71st Annual Meeting

Where: Zoom virtual meeting

Time: 6:30 p.m. EST

Due to COVID-19, the Steuben County SWCD Annual Meeting will be held virtually via Zoom on March 10, 2021 at 6:30 p.m. EST. At the Annual Meeting, we will share the District's year-end financial report, provide an overview of accomplishments this past year and hold an election for board supervisor. The candidates:

* Craig Holman *

Incumbent Craig Holman has been involved with farming and served as farm manager for various operations throughout his career. He has been a supervisor with the SWCD Board for the past 9 years, serving as its chairman since 2019. Craig has also been involved with Purdue Extension, serving on the Steuben County Purdue Extension Board. He is a lifelong Steuben County resident and enjoys assisting with 4H and FFA activities in the community. Craig also enjoys outdoor activities and collecting agricultural antiques.

* Terry Lee Dailey *

Terry Lee Dailey was born in Kendallville and grew up on a diary and crop farm. He attended Salem Center Elementary and graduated from Prairie Heights High School in 1970. While in high school, he was very active in FFA all four years, as well as many other activities. He was involved in the planting and harvesting of the school's crops, as well as his parent's crops. After graduation, he worked for Richard Frey on his farm, in addition to his parent's. In 1972, his father-in-law passed away, and Terry began managing his farm. He purchased his own 120 acres around 1980 and started milking at his residence. He continued to do so until about 21 years ago, growing strictly crops since then. Terry and Eloise have two daughters and are also the proud grandparents of three grand-daughters.

During the meeting, there will be an opportunity to make additional nominations to the election slate. If there is a nomination, they will be added to the candidate list. The election will take place using a poll feature on Zoom, which simply allows participants to click on their choice.

To participate, contact the SWCD office at (260) 665-3211, ext. 3 or email <u>steubenswcd@gmail.com</u> by 12:00 p.m. on March 9th for link information. An email will be required to receive the meeting link.

SWCD Annual Meeting Voter Eligibility

An individual of voting age (18 or older), or any representative of a firm, limited liability company, or corporation that owns or rents land or property located within Steuben County may vote. (Eligible individuals also includes the owner and tenant of the same land/property as well as any owner's or tenant's spouse).





ABOVE From left to right, SWCD Board Supervisor Chuck Howard, Gene Diehl, Tom Green (1999-2019), Craig Holman, and Kayleen Hart. Photo courtesy of Steuben County SWCD The 2020 SWCD annual meeting was held on March 11, 2020. Chris Weaver of Bridgewater Dairy Group, based in Montpelier, Ohio presented "Responsible Farm Management Practices".

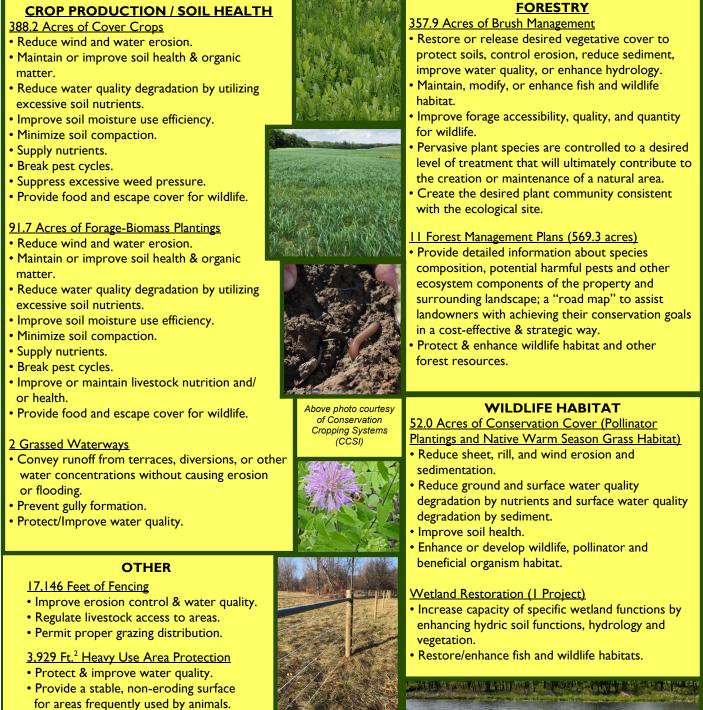
Chuck Howard was re-elected to the Board of Supervisors for an additional 3-year term. Former Board Supervisor Tom Green was honored for his devotion and leadership to the District for over 20 years. Tom retired from the board in March 2019. He was first appointed in October 1999 and served as Vice Chairman from 2000-2004 and Chairman from 2005-2019.

We were honored that Mary Martin (Regional Director to U.S. Senator Mike Braun), Landon Porter (Field Representative for U.S. Congressman Jim Banks), and Steuben County Councilmen Dan Caruso and Ken Shelton joined us.

2020 STEUBEN COUNTY SWCD HIGHLIGHTS

2020 Agriculture Conservation Practices

Listed below are the acres, feet, and/or number of conservation practices installed during the 2020 fiscal year and why they are important for conservation (practices include SWCD and NRCS projects).

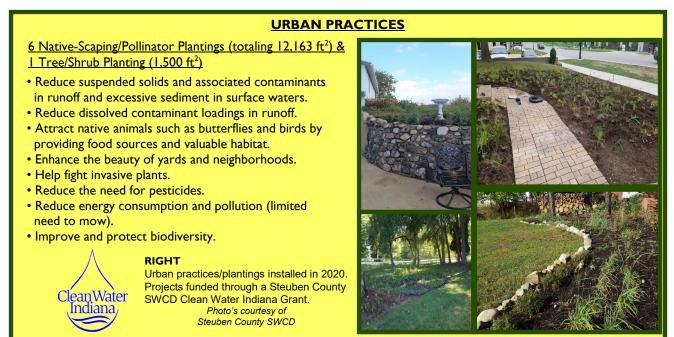


Page 6

2020 STEUBEN COUNTY SWCD HIGHLIGHTS

2020 Urban Conservation Practices

Below is a summary of conservation practices installed during the 2020 fiscal year and why they are important for conservation.



Steuben County SWCD Clean Water Indiana Urban Conservation Grant Program

In 2018, the SWCD received a Clean Water Indiana Competitive Grant focusing on urban conservation. The aim of the grant was to connect landowners with educational, technical, and financial assistance to implement conservation practices to protect and improve natural resources. Our goal was to help a non-agricultural, non-traditional audience rethink their properties by integrating conservation practices into existing landscapes; we wanted to **give** landowners money to transform their properties. Practices eligible for this grant included rain gardens, tree/shrub plantings, water edge enhancements (filter/buffer strips), and native-scaping (planting using native and noninvasive adapted plants). These practices reduce sediment and nutrients in water bodies, conserve water and improve water quality, increase food and shelter for wildlife, connect landowners with nature, and inspire a landowner stewardship ethic. This grant provided cost-share opportunities for all urban landowners in the county located on within a half mile of a waterbody.

Through this grant, we have partnered with BSAMTC LLC, the City of Angola, the Downtown Angola Coalition, Friends of Pokagon, the Town of Clear Lake/Clear Lake Township Land Conservancy and many landowners to replace lawn landscapes and introduce/return native plants or to improve lake riparian areas.

We are happy to report all grant funding has been obligated. We anticipate the remaining projects will be completed by early summer, 2021. We are thankful for this grant being selected for funding and grateful to all those landowners that were willing to rethink their properties and reduce their environmental impact.



2020 STEUBEN COUNTY SWCD HIGHLIGHTS

2020 Major Natural Resource Projects Summary

Steuben County 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. These 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	Comments
Grant Programs (Pigeon Creek GLSNRP; Fawn River LARE; CWI Urban Grant; District Cost-Share*)		
Site Visits and Consultations	47	
Grants to Landowners	16	
Educational Work		
Steuben SWCD Annual Meeting	40 attendees	Reported Accomplishments
Newsletter/Annual Report	4/year	1,676 on Mailing List
Steuben County SWCD Website/Facebook	2,499 users	
Educational Material Distribution—Youth Conservation Field Day	274 students	822 Booklets & 274 Backpacks
Steuben County Life	34 participants	9/15-10/20/20 (Tues. Evenings)
Tree and Food Plot Seed Program		
Tree and Wildlife Food Plot Seed-Participants	238	
Other Projects and Coordination with Conservation Organizations		
Steuben County Lakes Council Meetings/Water Quality Meetings	11/year; 2/year	
St. Joseph River Basin Commission Meetings	4/year	
Friends of the St. Joseph River Board Meetings	11/year	
Steuben County Government Meetings	2/month	Drainage Board, etc.
Steuben County SWCD Board Meetings	1/month	
Technical Assistance - Assist Public & Conservation Organizations with Various Natural Resource Concerns	77	Total number of consultations, emails, site visits, <i>etc</i> .

*GLSNRP = Great Lakes Sediment and Nutrient Reduction Program Grant (Great Lakes Commission)

LARE = Lake and River Enhancement Grant (Indiana Department of Natural Resources, Division of Fish and Wildlife) CWI = Clean Water Indiana (State of Indiana, ISDA Division of Soil Conservation)

District Cost-Share = Projects funded by the Steuben County SWCD



LEFT

September 15, 2020 Steuben County Life program at Moody and Crew Farms. Tyson Franks presented information about today's agriculture, technology and farming equipment.

Photo's courtesy of Steuben County SWCD

EDUCATION

The SWCD continues our commitment to inform communities about our natural resources and how to conserve them. We are strong believers that conservation education helps people of all ages understand and appreciate Steuben County's resources. This year presented a challenge to the district; many educational events were canceled due to COVID-19. Typically, the variety of adult and youth education programs we provide allows us to reach thousands of people every year.

The district is moving forward with adapting how we deliver conservation education. We'll be honest, it's a learning curve for staff and supervisors. Our goal is to develop materials that can be added to our website and available to anyone at the click of a button. This past fall, the SWCD partnered with Steuben County Purdue Extension and the Clear Lake Township Land Conservancy to develop an educational video series and worksheets for school children to replace the hands-on learning experience they would have received at field days. The videos are intended to be used in a classroom setting and will follow Indiana State Standards. The first video, "Earth as an Apple", has been completed. We hope to have it available on our website soon.

In 2020, the SWCD: launched a new website; partnered with Purdue Extension and hosted a birdhouse workshop; held our annual meeting; judged science fairs for Fremont Elementary Schools and at the Tri-State Regional Science Fair; sponsored our poster contest (held in conjunction with Stewardship Week); provided wildlife food plot seed; and hosted our annual Steuben County Life program. We also provided educational materials to the 4th-grade students for our Youth Conservation Field Day. Even though we were unable to host the event, we felt it was important to provide the three booklets, *"Learn about Water Conservation"*, *"Search for Soil"*, and *"The Surprising Story of Stormwater"*, along with the nylon backpack students receive at the conclusion of the field day.

We work with a variety of conservation partners, landowners, businesses, agencies, and organizations on several of our education programs. We would like to thank everyone for their assistance and support with this critical endeavor. We also recognize the many Affiliate Members - individuals, groups and organizations who choose to financially support our work. Donations received from Affiliate Memberships are used to help support our adult and youth information and education programs. Please see page 14 for a list of our 2020 Affiliate Members.

The Steuben County SWCD thanks:

- The **Steuben County Lakes Council** for sponsoring educational activity booklets for local 4th grade students within the county for our 4th-Grade Youth Field Day Education program, and **Bill Schmidt**, **Karen DeForest, and Lynn Wernet** for assistance with the Steuben County Life Program.
- **City of Angola/Trine University MS4** for sponsoring educational storm water activity booklets as part of our 4th-Grade Youth Field Day Education program.
- The Steuben County Community Foundation's **Ralph E. Taylor Grant** for providing a 2020 grant to support the 4th-Grade Youth Field Day Education program. Since the program was canceled in 2020, this grant will be used in 2021.

Angola Christian Church, Cahoots Coffee Café, Club Paradise, Moody & Crew Farm, Steuben County Airport, Steuben County Council on Aging, Inc., and Steuben County Government for providing workshop facilities.

Amanda German, Arthur Franke, Bruce Moody, Chris Weaver of Bridgewater Dairy Group, Denise Kreais, Gravity Powered Sports, Steuben County Commissioner Lynne Liechty, Nicky Ball, Randy Strebig, Robert Howard (Hamilton Lions Club), Rodney Snyder, Terry Hallett, Tom Saggars, and Tyson Franks for presenting at the SWCD's 2020 youth and adult education programs.

EDUCATION

2020 Tri-State Regional Science Fair Soil and Water Conservation Award Winners



that recognize the importance of conservation and stewardship of natural resources such as soil, air, water and energy. Awards consist of a certificate of recognition, and a \$75 award for the first-place project, a \$50 award for the second-place project, and a \$25 award for third place. Each winner is also presented with a conservation book.

We recognize and congratulate our 2020 Tri-State Regional Science Fair Soil and Water Conservation Award winners Olivia Benbow, Silas Refner and Max Creager.

First Place

Olivia Benbow, (A Comparison of Eutrophication and Toxification of Local Water Systems, Specifically, Retention Ponds in Residential Environments); DeKalb High School.

Based on Olivia's results, she developed recommendations for residential gardening, including (1) use natural fertilizers like vermicompost (i.e., the product of the decomposition process using various species of worms, usually red wigglers, and other earthworms, to create a mixture of decomposing vegetable or food waste, bedding materials, and vermicast) or a mix of recycled compost; (2) place fertilizers in the soil during the planting process - avoid spraying or placing on top of the region where fertilization is needed since rainfall can easily wash it away, impacting the ecosystem and making it less valuable to the growth of the plant; and (3) purchase or collect fertile soil and add to older, more unfertile soil instead of applying fertilizers.

<u>Second Place</u>

Silas Refner (Is Native Nature Nicer?); DeKalb Middle School.

Silas compared whether native or non-native flowers attracted the most pollinators. He hypothesized native flowers would attract the most pollinators because local pollinators are adapted to those plants. He concluded native species should be used to landscape instead of non-natives to maintain healthy pollinator populations (i.e., bees).

• Third Place

Max Creager (What's the Right Mix? Creating Compost from Organic and Carbon Materials); Fremont Elementary School.

Max investigated what mixture of carbon and organic materials were best for composting.

Providing conservation awards has given the DeKalb, LaGrange, and Steuben County SWCD's the opportunity to reward local deserving students for work in natural resources conservation. It has also allowed the districts to present a conservation message to the larger group, both young people and their parents, that assemble every year for the awards ceremony.

"As a nation we need to renew our acquaintance with the land and reaffirm our faith in its continuity of productiveness—when properly treated. If we are bold in our thinking, courageous in accepting new ideas, and willing to work with instead of against our land, we shall find in conservation farming an avenue to the greatest food production the world has ever known—

- Hugh Hammond Bennett

2020 STEWARDSHIP WEEK POSTER CONTEST WINNERS

In 1955, the National Association of Conservation Districts (NACD) began a national program to encourage Americans to focus on stewardship. This national program is known as Stewardship Week; officially celebrated from the last Sunday in April to the first Sunday in May. It is one of the world's largest conservation-related observances.

NACD recognizes education as a critical element of the conservation effort at local, state and national levels. The Steuben County SWCD also recognizes the importance of education by promoting and sharing information about stewardship and conservation. We provide information to youth and adults, so both can gain a better understanding and appreciation of our natural world.

Each year, the NACD Stewardship and Education Committee develops a different theme. The 2020 theme was pollinators. Pollinators form the foundations of a healthy and sustainable future for food and the environment. During Stewardship Week, the Steuben County SWCD provides educational activity booklets for the MSD of Steuben County and Fremont Elementary Schools. We also sponsor a poster contest. The contest provides students from 1st through 5th grade the chance to have their art displayed as part of a local conservation outreach initiative. Each year, the winning posters reflect the National Association of Conservation Districts (NACD) annual Stewardship theme and highlight the work of conservation districts, auxiliaries and agencies to protect and enhance natural resources.

Due to schools transitioning from in-person to virtual learning this past spring, the SWCD was unable to provide the educational activity booklets; however, we moved forward with the poster contest, allowing posters to be submitted via mail, electronically, or in-person. Below, our 2020 Stewardship Week poster contest winners are recognized. The poster theme: "Where Would We Bee Without Pollinators".



LEFT

Each student that submitted a Stewardship Week poster received an award certificate, colored pencils, a Backyard Birds and Blossoms coloring book, a scratch-mark bookmark, and a bee house.

Bottom row, left to right (2st Grade Category):

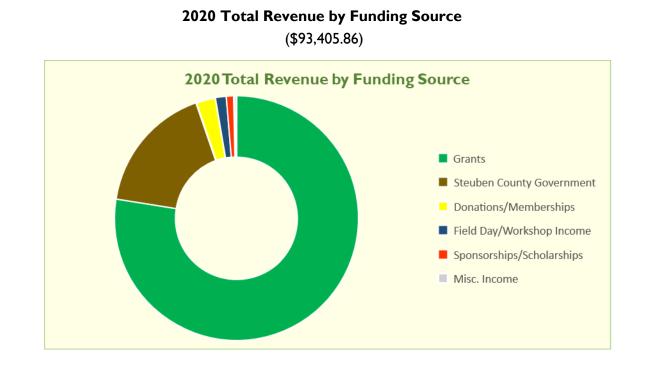
Leina McHenry; Ryan Park Elementary Peter Smith; Ryan Park Elementary Andrew Miller; Ryan Park Elementary Benjamin Bonifay, Ryan Park Elementary (*Mrs. Clary's students*) Photo courtesy of Steuben County SWCD

"You can really change the world if you care enough"

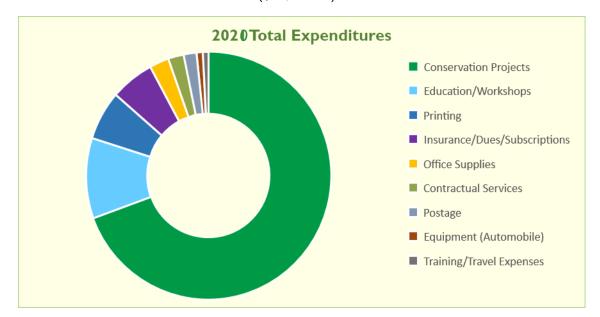
2020 FINANCIAL REPORT

Receipts	
State—Clean Water Indiana (CWI) Matching Grant for District Operation	\$10,000.00
County for District Operation*	\$16,000.00
Federal Funds—Great Lakes Sediment and Nutrient Reduction Grant for Pigeon Creek	\$46,877.45
State Funds—Lake and River Enhancement (LARE) Watershed Land Treatment Grant	\$15,031.61
Non-Government Grants (Steuben Co. Community Foundation Grant)	\$500.00
Workshop/Field Day Income—Steuben County Life	\$1,310.00
Donations & Memberships	\$2,422.00
Reimbursements/Refunds/Sponsorships- Conservation Education	\$1,000.25
Sales Income– Flags & Rain Barrels	\$220.00
Interest on Savings Account	\$44.55
Total Income	\$93,405.86
Balance brought forward from 2019	\$35,256.78
TOTAL RECEIPTS	\$128,662.64
Disbursements	
Annual Meeting Expense	\$1,096.80
Clean Water Indiana Projects	\$9,091.90
Conservation Education Programs	\$3,183.41
Contractual Services	\$1,472.00
Cost-Share Projects—SWCD Funded	\$6,850.00
Cost-Share Projects—Federally Funded	\$27,447.70
Cost-Share Projects—State Funded (LARE)	\$7,500.00
Dues and Subscriptions	\$3,394.00
Office Supplies	\$1,695.99
Postage	\$1,277.08
Printing/Copying Expense	\$4,731.60
Sales Tax	\$11.12
Travel/Lodging/Mileage/Registration/Meals	\$268.00
Workshop/Field Day Expense—Steuben County Life	\$1,338.64
District Vehicle - Fuel, Repairs, and Maintenance	\$615.67
Computer Expenses- Web Design and Hosting	\$991.00
Insurance	\$834.00
Other Services & Charges– Flags	\$206.26
Other Disbursements- Steuben Co. Community Foundation ARS Education Grant	\$1,063.25
Other Disbursements– Website Wordpress Training	\$250.00
TOTAL DISBURSEMENTS	\$73,318.42
Balance in Checking at December 31, 2020	\$55,299.67
Petty Cash	\$100.00
Savings Account	\$41,875.31

2020 FINANCIAL REPORT



2020 Total Expenditures (\$73,318.42)



AFFILIATE MEMBERS

Affiliate members are individuals, groups or organizations who choose to financially support the work of the Steuben County SWCD. Donations received from Affiliate Members are used to help support District information and education programs for youth and adults.

THANK YOU TO ALL OF OUR **2020 AFFILIATE MEMBERS** Aquatic Enhancement & Survey, Inc. Kenn-Feld Group, LLC **Booth Farms Kevin Northup Excavating Cameron Memorial Community Hospital** Lake George Conservancy, Inc. **Carper Farm Supply, Inc.** Niann Lautzenhiser (Hamilton, IN) **Caruso's Restaurant** Peter Mountz (Garrett, IN) **City of Angola/Trine University MS4** S & P Earthwork, Inc. **Clear Lake Township Land Conservancy** Sandhill Environmental Services LLC Bill & Diana Clingan (Hudson, IN) Sheets LP Gas, L.P. **Daft Erosion Control LLC** Erik & Laura Sorensen **Dailey Farms Steuben County Lakes Council** Tom & Marilyn DeWeese (Angola, IN) **Stoy Farms Edon Farmers Co-Op Stroh Farm Supply Steve & Pauline Elett Tom Green Engineering** Farm Credit Mid-America John Williamson Franklin Paul Group, LLC The Wilson Farm in Memory of Hoham Feed and Seed Loyal Wilson **Deloris Howarth Travis Wilson** Tom Wilson

The District Board gratefully acknowledges our 2020 Affiliate Members. If you would like to support conservation in Steuben County, please complete the 2021 Affiliate Membership Form on the back page and mail it with your check or money order to:

Steuben County SWCD 1220 N 200 W, Suite L

THANK YOU Lake & River Enhancement Program

The Steuben County SWCD thanks the Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife (DFW) Lake and River Enhancement (LARE) Program for awarding grant funding for Fawn River and Pigeon Creek Watersheds in 2020. These grants provide cost-sharing payments to landusers to apply or construct practices on their land that reduce the amount of sediment and nutrients entering area waterbodies.

Page 15

CONSERVATION PARTNERS



ABOVE

Conservation in action: Two-Stage Ditch. Two-stage ditches are drainage ditches that have been modified by adding benches which serve as floodplains within the overall channel. The benches are vegetated and can slow water during higher flows, allowing sediments and other nutrients in the flow to settle reducing downstream exports of nutrients and sediment. *Photo courtesy of Steuben County SWCD*

There are many other agencies and organizations working to improve the health and ecology of our community. The Steuben County SWCD has worked alongside many agencies and organizations in order to accomplish large scale, mutual goals. We recognize these partners here, with enormous appreciation for the results we are achieving together.

- Blue Heron Ministries
- City of Angola/Trine University MS 4 Stormwater Management Program
- Clear Lake Township Land Conservancy
- Crowe Forest Management LLC
- Friends of the St. Joseph River
- Pheasants Forever
- St. Joseph River Basin Commission
- Steuben County Government
- Steuben County Lakes Council
- The Herald Republican
- WLKI

The Steuben County SWCD is proud to work in partnership with a diversity of federal, state, city, and local community agencies and organizations to promote and implement conservation.

We are an active partner in the Indiana Conservation Partnership (ICP), which is comprised of eight (8) Indiana agencies who share a common goal of providing technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies. The Steuben County SWCD is an active partner, alongside:

- Indiana Association of Soil & Water Conservation Districts, and their 92 SWCDs
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources
- ISDA Division of Soil Conservation
- Purdue Cooperative Extension Service
- State Soil Conservation Board
- USDA Farm Service Agency
- USDA Natural Resources Conservation Service



SPOTLIGHT ON CONSERVATION

Indiana, the Western Lake Erie Basin, and the Steuben SWCD

Boundaries in our daily lives matter – what city, county, or state we live in are invisible but important divisions that drive a lot of what happens in our daily lives – where we pay taxes, where we send our children to school, who we call our local community, the rules that govern our society, and where we get our drinking water. Watershed boundaries are not considered nearly as much, even though they too have long-term, continuous affects in our daily lives. We directly influence the bodies of water in our communities, as well as downstream waters. Watershed boundaries don't often follow legal boundaries. Life experiences suggest this could perpetuate misunderstanding or could result in a way to unite.

For perspective, lets look at Lake Erie. Lake Erie is the shallowest of all of the Great Lakes, which collectively contain 20% of the freshwater on the entire Earth. Lake Erie contains only about 2% of the water in the Great Lakes, but produces about 50% of the fish. Recreation and tourism in and around the lake is approximately a 14 billion dollar/year industry, with at least 1 in 8 people living around the lake being employed in directly related jobs. Lake Erie provides drinking water for 11 million people. So on one hand, not being good stewards could potentially impact the most abundant fishery in the Great Lakes, could leave approximately 13% of the surrounding residents directly without jobs, and could leave 11 million people without safe and clean water to drink. On the other hand, and more importantly, being good stewards is a wonderful opportunity to be part of a healthy water quality solution.

In Indiana, we have six counties that drain approximately 12% of the water that drains to the Western Lake Erie Basin (WLEB) via the Maumee River. Over 70% of our Indiana portion of the WLEB is agricultural land use, 15% is developed, and the remaining 15% is forests, wetlands and open water. Additionally, since pre-settlement, we have lost approximately 85% of our wetlands, which according to the US EPA are, "valuable natural resources...[and] have important filtering capabilities for intercepting surface water runoff from higher dry land before the runoff reaches open water."

Since the mid-1990s harmful algal blooms (HABs)

in Lake Erie have been on the rise, with 5 of the worst blooms in history happening within the past ten years. There is a binational agreement between Canada and the U.S. called the Great Lakes Water Quality Agreement to reduce phosphorus inputs to Lake Erie to reduce the occurrence of HABs. In 2013, the Nutrients Annex 4 Binational Subcommittee of the Great Lakes Water Quality Agreement formed, and for the duration, Indiana has been an active member of the subcommittee. The role of this subcommittee is to coordinate actions from Canada and the U.S. to manage phosphorus loadings and concentrations in the Great Lakes. This includes decreasing the severity, duration, and toxicity of harmful algal blooms (HABs).

At the state level, Indiana, Michigan, and Ohio, each have a published Domestic Action Plan (DAP) to reduce phosphorus inputs to Lake Erie. In April 2016, Indiana formed a diverse advisory committee to provide input for the DAP. The draft was put on notice for a 60-day comment period in August of 2017, and was published in February 2018. The Indiana DAP is based on adaptive management, and is considered to be a living document, noting that phosphorus loading is a complex problem. There is no silver bullet or quick fix to decreasing HABs in Lake Erie, instead a multi-layered approach is needed to address nutrient and sediment loading, and reduce phosphorus inputs to the lake.

In order to understand what is happening with regards to sediment and nutrients in the WLEB, consistent and reliable water quality monitoring is a must. Heidelberg University's National Center for Water Quality Research in Tiffin, OH, has been taking water samples in the WLEB since 1975, and has the most extensive data in the Ohio part of the WLEB. The U.S. Geological Survey has a long history of water quality and water quantity data across the nation, and now have some water samplers at key places in the WLEB. The Indiana Department of Environmental Management has a more than 40-year record at some of their sampling sites in Indiana, and there are additional local sampling efforts in different areas of the watershed. These long term data sets can be useful in determining trends over time, and some of the information has been used in conjunction with weather data and other data to develop

continued on page 17

SPOTLIGHT ON CONSERVATION

Indiana, the Western Lake Erie Basin, and the Steuben SWCD (continued from page 16)

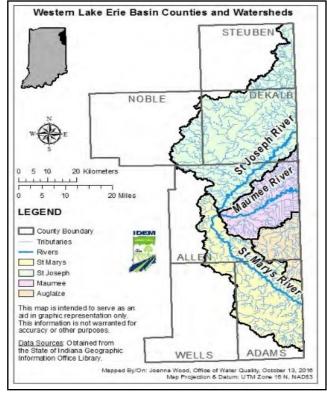
models to predict the size of the HAB in Lake Erie each year. There is also now real time data for residents and infrastructure such as water filtration plants to know precisely what is needed hour to hour to treat drinking water, improving its safety for the end user.

Every year Ohio Sea Grant hosts an event in collaboration with several experts and organizations to announce the predicted severity of the harmful algal bloom that will happen in Lake Erie. The typical bloom season is July to October as this is when the lake conditions are just right for growth. This year the forecast was a bloom with a severity index between 4 and 5, on a ten-point scale. The forecast is based on a few different models, and takes a wide range of data into consideration, including water quality data and weather. The actual bloom for 2020 had a severity index of 3, slightly lower than predicted. This severity index describes the amount of algae over the peak 30 days of the bloom. The size of the bloom is not necessarily related to the toxicity of the bloom. It is possible to have a large bloom with low concentrations of toxin, or a small bloom with high concentrations of toxin.

In our own watersheds, on our own land, individually we <u>all</u> have great potential to be good stewards for water quality. The best part of this is, reducing your input of sediment and nutrients to receiving waters do not have to come at a cost. These reductions can be win/win situations, where there can be a cost savings to the landowner, and also an environmental benefit. Win/win.

If you are in an urban area, adding rain barrels, a rain garden, or native plants to your landscape can help store water on the land for use later. Decreasing the amount of fertilizer used for lawn care and eliminating phosphorus fertilizer for established lawns that do not need a phosphorus input, can reduce the amount of excess nutrients that reach receiving waters.

If you are a rural landowner, there are opportunities to use best management practices (BMPs) like filter strips, grassed waterways, cover crops, conservation tillage/No-Till, and employing the 4Rs of Nutrient Stewardship (right source, right rate, right time, right place) to help reduce sediment and nutrients from escaping to receiving waters. More precise fertilizer application means lower usage overall; this too translates to greater cost savings.



ABOVE Western Lake Erie Basin (WLEB) Counties

and Watersheds. Map courtesy of Indiana's Domestic Action Plan for the WLEB (page 8)

If you would like to take steps toward conservation, no matter where you are on your journey – whether proficient, or just starting, urban or rural, the Steuben SWCD is a wealth of knowledge on conservation practices that can help improve soil health and water quality, and also on information around cost-share programs that might be available to landowners to employ BMPs. Our mission is to help the natural resources of Steuben to be used wisely, and we are here, and pleased to help.

You might think that your property doesn't have much impact on the bigger picture, but it's possible for our decisions to reach past our boundary lines. Why not add a new conservation practice on your land this year?

Page 18

2020 ANNUAL REPORT

SPOTLIGHT ON CONSERVATION

The Importance of Indiana's Rule 5 Regulation

by Kris Thomas, City of Angola MS4 Coordinator

For those concerned with water quality, it is important to know and understand the laws that protect Indiana's waterways. It is important to understand not only the purpose of the law but to understand the requirements specified in the law. If either of these are not understood, confusion and frustration may result. "Rule 5" is a water quality regulation that is not very well-known and sometimes not completely understood. Because this rule addresses requirements to protect Indiana's waterways, it is important to understand its purpose and content.

The purpose of Rule 5 is to protect Indiana's waters by reducing pollutants, primarily sediment, associated with construction or other land-disturbing activities through the issuance of a Construction Site General Permit. Rule 5 is an Indiana Administrative Code, 327 IAC 15-5, and it provides the legal framework, or requirements, for this general permit program administered by the Indiana Department of Environmental Management (IDEM) Stormwater Program.

Land disturbance results in the removal of stabilizing forces that would normally keep soil in place, such as plant cover. This results in loose soil, or sediment, which can be carried away when it mixes with runoff from a rainstorm or snowmelt. This polluted stormwater will then make its way to local waterways causing negative impacts on water quality. Because of this, a primary focus of Rule 5 is protecting our water resources through the implementation of erosion and sediment control measures. Soil erosion rates from unmanaged construction sites are far higher than rates resulting from agricultural activities, such as row crops and active pastures. Rule 5 requires the implementation of proper control measures to reduce sediment leaving the project site.



ABOVE

A Steuben County Drainage Ditch filled with sediment. Sediment was released from a construction site when the sediment and erosion control measures outlined in the Stormwater Pollution Prevention Plan (SWPPP) were not properly implemented for the project. Photo courtesy of City of Angola MS4 Department The application of Rule 5 begins when a land-disturbing activity meeting the parameters set forth in the regulation are met. It is important to understand that Rule 5 DOES NOT APPLY to all projects. For the requirements of Rule 5 to apply, the total land area disturbed must be at least one (1) acre. Projects that are under the one (1) acre threshold DO NOT have to meet the requirements set forth in Rule 5 (unless part of a larger common plan of development or sale). This means smaller projects exempt from Rule 5 would need to have these requirements set forth in local law, typically in an ordinance. Other state laws pertaining to water quality may be applicable if water quality issues *continued on page 19*

327 IAC 15-5 is a performance-based regulation designed to reduce pollutants that are associated with construction or land-disturbing activities that results in the disturbance of one (1) acre or more of total land area. If land-disturbing activity results in disturbance of less than one (1) acre of total land area, but is part of a larger common plan of development or sale, the project is still subject to storm water permitting.

SPOTLIGHT

ON

CONSERVATION

The Importance of Indiana's Rule 5 Regulation (continued from page 18)

arise during the construction of these small projects; however, the erosion and sediment control requirements of Rule 5 would not apply.

Once it is determined that a land-disturbing project falls under the Rule 5 requirements, a plan review is conducted by the appropriate agency. It is important to understand the plan review process focuses on reviewing erosion and sediment control measures proposed for a project based on a Storm Water Pollution Prevention Plan (SWPPP) submitted by the developer or the developer's representative. The plan review is not a comprehensive review of the design of the proposed stormwater infrastructure. Once the reviewer has determined the proposed erosion and sediment controls are sufficient for the protection of Indiana's waterways during and after construction, approval is given to the project.

If any conditions that are contrary to the requirements in Rule 5 are discovered during the construction phase, these conditions must be handled by an agency given legal authority to initiate enforcement actions. While Soil & Water Conservation Districts (SWCDs) have the authority to review Rule 5 plans, they have not been given the legal authority to initiate enforcement actions. SWCD representatives may provide technical assistance, but they cannot bring about an enforcement action if necessary. If a local community lacks an enforcement authority, IDEM can act as the enforcing agency.

The enforcement of Rule 5 requirements ends once the determination has been made that all construction and post-construction requirements have been met. At that time, the project permit is terminated by IDEM. If drainage or flooding issues arise after a project has been terminated, these issues would be handled by the appropriate agency with jurisdiction. Depending on the jurisdictional boundaries, these issues may be handled by a drainage board or county surveyor, or in some cases a Municipal Separate Storm Sewer System (MS4) Coordinator.

In summary, Rule 5 focuses on erosion and sediment control measures for land-disturbing projects that are



ABOVE

A breach in silt fence. A silt fence is a temporary barrier of entrenched geotextile fabric stretched across and attached to supporting posts and installed on the contour to intercept and treat sediment-laden storm water runoff from small, unvegetated drainage areas installed around construction sites. Sediment was released from this construction site when the breach occurred; silt fence was the wrong application for site conditions.

Photo courtesy of City of Angola MS4 Department



LEFT Sediment-laden runoff entering a parking lot inlet. Photo courtesy of City of Angola MS4 Department

one (1) acre or more total land disturbance to protect Indiana's waterways from stormwater runoff related to these projects. Smaller projects are not required to follow the provisions of Rule 5. The information contained in this article is intended to be an overview of Rule 5. It is not intended to provide a comprehensive review of all the provisions in Rule 5. Questions related to other requirements included in this rule may be directed to the SWCD, IDEM, or a MS4.

CONSERVATION DISTRICT	Steuben County Soil & Wate Conservation District	eı
	Peachtree Plaza 200 I 220 N 200 W, Suite L Angola, IN 46703 260-665-3211, ext. 3	

Providing leadership and assistance in the proper use and management of soil, water, and related natural resources in Steuben County.

All programs and activities of the Steuben County Soil and Water Conservation District and its Partnership Agencies are offered on a nondiscriminatory basis, without regard to race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program.

2021 Affiliate Membership Form

Yes, I am interested in being an Affiliate Member of the Steuben County Soil and Water Conservation District for calendar year 2021. It is my understanding that the donations received from Affiliate Memberships are used to supplement the District's Information and Education programs for youth and adults, and that the District will publish a list of Affiliate Members in its annual report and newsletters throughout the year (circulation - over 1,600 individuals).

ersonal or Business Name:
ddress:
ity/State/Zip:
Iembership Levels
\$25.00 - Bronze Level
\$50.00 - Silver Level
\$75.00 - Gold Level
\$100.00 and above - Platinum Level
ignature: Date:
Please return this form with your donation made payable to: Steuben County Soil and Water Conservation District A receipt will be mailed to you to acknowledge your donation THANK YOU FOR YOUR SUPPORT!
Steuben County SWCD • 1220 North 200 West, Suite L - Peachtree Plaza 200 • Angola, IN 46703